Sedgemoor District Council and West Somerset Council

Nuclear Project Evaluation - Hinkley Point C

Technical Evaluation of EDF Hinkley Stage 1 Consultation Document

FINAL

Sedgemoor District Council and West Somerset Council

Nuclear Project Evaluation - Hinkley Point C

Technical Evaluation of EDF Hinkley Stage 1 Consultation Document

December 2009

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Executive Summary

This summary sets out the principal recommendations of Sedgemoor District Council and West Somerset Council (referred to as the authorities) drawing from the Technical Evaluation of EDF's Hinkley Stage 1 Consultation Document (referred to as the Technical Evaluation Report). The full response of the authorities is set out in the Technical Evaluation Report.

1. Associated Development

The authorities refer EDF to the Technical Evaluation Report for details on planning policy, environmental constraints and other technical issues associated with the sites identified by EDF for off site associated development. Based on the findings of this technical evaluation the authorities recommend that the sites taken forward for associated development should meet the following requirements:

a) Any development proposed for a site conforms with emerging and approved local policy including policies to focus development around the principal urban settlements of the Districts. The Sedgemoor Local Plan (September 2004) identifies Bridgwater as the County's third largest town, and offers the best facilities, the most employment and the greatest accessibility by public transport within the District. Development in other settlements (identified as Rural Centres and Villages in the Local Plan) should be such that will sustain and enhance their role and will be commensurate with their size and accessibility (and therefore capacity to accommodate such development), and appropriate to their character and physical identity. If development (whether of a permanent or temporary nature) is proposed within rural centres or villages that does not meet these policy requirements then such development would need strong justification. Part of this justification will be explaining why there are no other acceptable sites for the intended use available on sites within or on the edge of the main urban settlements.

b) The development of any site for associated development site should maximise the potential for long term legacy benefits. For example, the authorities would prefer the provision of housing accommodation for workers that is of a permanent form of construction and that can be adapted and transferred following construction of the Hinkley project to an appropriate body to address local housing need. The architectural form and composition of this housing accommodation should therefore reflect the local housing need. With respect to park and ride sites the authorities would prefer EDF to use sites that could ultimately provide a legacy benefit, for instance through responding to the authorities and the County's transport and park and ride strategies.

c) That there are no overriding policy or environmental constraints to developing the sites.

d) The developments should take account of the Sustainable Community Strategy for Sedgemoor and wider Somerset, Economic strategies of both Districts, and the Bridgwater Vision, as well as corporate and regeneration objectives, and should set out how the proposals can assist in delivering the strategies, priorities and outcomes.

e) Any development will be assessed against the Sedgemoor economic checklist and an employment and skills charter will be sought in line with council policy, if the development would proceed.

f) Sites other than those identified could be explored with the Council, to enhance town centre regeneration, and the accelerated delivery of the Bridgwater Vision.

g) The authorities are concerned that a detailed construction strategy for the project does not form part of the Stage 1 consultation document and we recommend that such a strategy is prepared. It has been difficult for the authorities to understand the number of off-site associated development sites, the overall area required for construction related activities, the optimum location for these sites to minimise traffic related impacts and how the sites will link together as part of a coherent construction strategy for the project. The authorities request

that in preparing a construction strategy EDF take account of sustainability and environmental objectives for the project, such as minimising the impact of traffic on local communities (and that these measures are demonstrated in full). EDF should also consider the benefits of concentrating facilities within a smaller number of sites, possibly within or on the edge of Bridgwater rather then dispersing construction activity over a wider area or in unsustainable locations. Such an approach may be more sustainable and could result in a lower level of traffic related impacts on local communities then a more dispersed construction strategy. The authorities recommend that work on the Construction Strategy is urgently undertaken by EDF. The authorities would also encourage EDF to detail options at the earliest opportunity and that when documenting preferred options at the Stage 2 consultation no 'new' options should be incorporated.

2. Community Benefit

The authorities are concerned that the description of community benefits within the Stage 1 Consultation Report includes limited reference to aspirations from within the community, the local authorities or other key stakeholders who will have an interest in the Hinkley project. Furthermore, how EDF's approach to providing community benefit will respond to local policy is not explained. These matters may be addressed through the Stage 1 consultation process as community aspirations are raised by stakeholders and local communities who respond to the Stage 1 Report. The authorities set out below their overarching objectives for community benefit:

a) The authorities will raise through the NPS consultation the need for Government to enable community benefit to be secured to invest in the long term sustainability of the community affected.

b) The authorities request that a community benefit package is developed to offset the consequences of hosting any new nuclear project and this package should be proportionate to the actual and perceived impacts on public health, the environment, local infrastructure, the communities and the local economy. The package should be commensurate to the actual and perceived impacts associated with a nuclear project including any proposals for interim waste storage. It is recommended that both UK and overseas examples of community benefits packages that have been provided for other nuclear projects are evaluated including those currently being proposed for geological nuclear waste disposal facilities.

c) The authorities recommend that community planning and political processes are used for identifying local aspirations for community, social and economic investment based on the needs of the communities that will be affected by the Hinkley Project. We recommend that governance of this process and the links to the formal negotiations are agreed as soon as possible and that the responsibilities and roles of the authorities and EDF are understood so that the process of negotiating the necessary community, social and economic investment can commence. This would allow communities, the authorities and EDF to have a much better understanding of the type of community, socio and economic benefits over and above the skills/workforce development considerations identified in the Stage 1 Report. The authorities also require more detail on the mechanisms to be employed by EDF to ensure support for local supply chain development initiatives and inward investment is secured, and how such initiatives may secure legacy benefits.

d) The authorities recommend that in parallel with the identification of the required community, social and economic benefits an evaluation should be undertaken of overseas and UK experience and the delivery and funding mechanisms (for examples annual payments, lump sums, capital and revenue support, Community Trusts etc.) to secure the benefit. Options for governance structures should be explored that include an evaluation of social enterprise delivery models appropriate for discharging long term responsibilities. Further detail on the possible approaches to delivering community benefits are set out in the Technical Evaluation Report (section 5.3). The authorities require EDF to detail measures to secure

benefits aimed at construction training, employment and enterprise; employment and skills in relation to the operation; community development initiatives e.g. community business/social enterprise start-up units; and mitigation measures e.g. transport.

e) The authorities will develop a programme of work, following the approval of a community benefit work package, to undertake the work set out above. This will inform the preparation of the Development Consent Order (DCO) application and the drafting of a Development Consent Obligation. The authorities request that a draft of the Development Consent Obligation is prepared and agreed with the authorities by the time that a DCO application is submitted to the IPC.

3. Socio-Economic Impacts (Procurement and Training Issues)

The draft Overarching National Policy Statement for Energy (EN-1) November 2009 states that *"applicants should describe the existing socio-economic conditions in the areas surrounding the proposed development and could also refer to how the development's socio economic impacts correlate with planning policy".* This analysis is lacking in the Stage 1 document, including any analysis of how EDF's approach to "training and employment" can create positive outcomes towards achievement of the authorities Local Authority Area (LAA) targets. The authorities are concerned that there is a significant risk that the project may not create the level of outcomes likely to make serious in roads to achieving LAA targets and are seeking more confidence in this area.

Furthermore the authorities have identified the following principal issues with the information presented in the Stage 1 Report:

a) Impacts are presented in terms aligned to EIA assessment methodologies and the authorities are concerned that this is not an appropriate method to accurately assess the economic issues in the area and the impacts of the project. An understanding of the economic impacts, particularly on local labour content of the project, needs to be based on a full assessment of the locality and the likely supply chain relationships of the project drawing from international data on the economic impact of similar projects (with similar reactor technologies).

b) As a consequence the authorities believe that the analysis of Local labour content at 50% may over estimate the scale of local labour participation in the project especially for the immediate locale. This is particularly important as it sets the context for the accommodation strategy and is also likely to inform the approach to transport and logistics;

c) There is a need for a follow-through analysis from baseline analysis to strategy. This is currently unclear from the Stage 1 consultation report, especially in relation to creating opportunities for the more deprived hard to reach and low wage groups within the population;

The authorities therefore recommend that these issues are addressed through further socio-economic impact work drawing from labour supply data from projects recently constructed in other countries.

Following the completion of this work and having discussed the implications of the findings with the authorities we recommend that a "Training and Procurement Strategy" is prepared and agreed with the authorities for the project prior to the submission of the Development Consent Order (DCO) application.

The Strategy would address the issues associated with the deficiencies in information on training and procurement as set out above and in more detail within Section 6 of the Technical Evaluation Report. This Strategy should identify a route map for different groups of people on "out of work" benefits describing how the project could create opportunities for different groups and would explicitly recognise LAA targets.

4. Cannington By-pass

The authorities are concerned that a new bypass at Cannington would be a major development in its own right and potentially could result in significant environmental impacts. Therefore the proposals for a by-pass must be fully justified with a rigorous environmental and transport assessment of the alternatives. This justification is considered to be largely absent from the Stage 1 consultation document (particularly in terms of evaluating development-induced transport effects). At this stage, the authorities can reach no material conclusion on the preference for either route option presented in the Stage 1 consultation document and are unlikely to be able to reach a conclusion until the full justification has been provided. This must be supported by a full transport and environmental assessment of the options. The authorities also recommend that the options appraisal should also assess a 'no bypass' scenarios alongside the bypass route options, and should incorporate information on public transport proposals associated with each option.

In addition, the authorities consider that more detailed consultation is required with Sedgemoor District Council. Discussions are also required around potential long term sustainability benefits or impacts of the by-pass options including:

a) Flood risk management for Cannington;

b) High quality public transport proposals along the A39;

c) Joint car parking and travel planning for EDF and Cannington College.

d) Traffic management in the village centre

e) Providing access to limited housing and small business growth to meet local needs.

5. Other Transport Issues

The authorities' primary concern is with the transport case to support the proposals set out in the Stage 1. These are set out in full in section 11 of the Technical Report and in summary are:

a) There is no transport justification presented for the 200 capacity accommodation campus and freight consolidation centre at Cannington South. Given the absence of a transport case for the Cannington South the transport and traffic management benefits of this location compared to other locations nearer to the strategic road network, (for example near to the M5 J23 or J24 at Bridgwater) are not understood.

b) The rationale for a Campus or Park and Ride site at Williton is also not presented and therefore it is also unclear what are the transport and traffic management benefits of this location compared to other locations nearer to the strategic road network;

c) Similar comments apply to the lack of a transport and construction logistics rationale as well as a justification for the scale of the facilities proposed for park and ride sites, freight centres and accommodation campuses at other locations.

d) There is insufficient justification given for not taking forward a Bridgwater bypass option within the Stage 1 Report. The transport and traffic case for rejecting this option needs to be described, evidenced and presented in full to the local planning authority.

e) Finally, no information is presented within the Stage 1 report on the public transport, cycling and pedestrian enhancements required to serve local transport needs of the accommodation campuses options in Bridgwater and Cannington.

6. Preliminary Works

It is understood that EDF intend to submit applications for preliminary works in advance of the submission of an application for the main project and associated development to the IPC. It is also understood that a planning applications will be submitted to the local authorities (principally West Somerset Council) for some of the preliminary works and a Harbour Empowerment Order Application will be submitted to the Department for Transport for the construction of a temporary aggregates jetty. Given that the design of these preliminary works should be at a relatively advanced

stage, with applications likely to be submitted in March 2010 (according to EDF's programme), the authorities are concerned that further details of these works and consent processes have not been made available as part of the Stage 1 consultation material.

The authorities are concerned that the information made available on the preliminary works has not allowed the public to influence the development of these elements of the overall project. No options have been presented and little information on the details of the proposals was made available. There is significant local concern about these elements of the project and to date no proper justification has been offered regarding the need for these elements of the project other than notional commentary on EDF's programme.

The Stage 1 Consultation document is focused on Hinkley Point C as a whole and the significance of individual project elements, including the preliminary work, appears to be overlooked. The temporary aggregates jetty and other preliminary works are treated almost as a necessary step in the construction process rather then elements of the 'project' in their own right. The authorities therefore require that more details are provided on preliminary works aspects of the proposals as well as other elements of the project, including the construction of the jetty, new sea wall, cooling water intakes and outfalls, and refurbishment of Combwich Wharf. This information should be provided and discussed with the local authorities and the relevant statutory bodies prior to submission of any preliminary work applications. In addition, the authorities require further information on the planning strategy for these applications, including the consultation activities programmed for all elements; the relationship of technical information and the mechanisms to evaluate cumulative effects of the development in its entirety.

7. Other Technical Issues

The authorities recommend that EDF considers all the comments and recommendations set out in the Technical Evaluation Report but highlight below the following additional issues associated with the adequacy of the technical information presented in the Stage 1 Document:

a) It is understood that further Phase 2 intrusive investigations are planned, although no details are provided regarding the scope and timing of the investigations. This should be included to allow commentary to be made on its adequacy.

b) Whilst the land contamination section adequately identifies potential existing contamination and how this should be considered, there is no reference to identifying potential contamination created during the construction, operational and decommissioning phases of the proposed Hinkley Point C. A paper explaining how these impacts will be addressed and mitigated should be provided.

c) Consideration of non-radioactive and radioactive waste and the long term impact on human health and the environment as a result of such proposals needs to be provided. The future studies setting out this evaluation should be identified and ideally should form part of a comprehensive Health Impact Assessment (HIA) for the project.

d) The methodology to be employed to assess the cumulative impacts of the decommissioning of Hinkley Point B, estimated to take place in 2016, needs to be provided and this cumulative impact should form part of the Environmental Impact Assessment of the project.

e) Further information is needed on the methodologies to assess in-combination and cumulative environmental and socio-economic impacts of the Hinkley project along with other infrastructure projects, plans and programmes in the wider area (including the Severn Barrage, Oldbury nuclear power station proposals by the Horizon Nuclear Power group; Bristol Container Port and the Steart Peninsula works).

f) Further information is required on the scope and methodology for the Flood Risk Assessment study (including approaches to addressing predicted climate change effects);

g) The full reports associated with terrestrial ecology surveys should be made available and confirmation is sought from EDF on whether the statutory consultees agree that no further ecological surveys are required to inform the environmental impact assessment.

h) Further detail is required on national conservation designations and the qualifying ecological features of importance.

i) The full reports associated with marine and coastal ecology surveys should be made available and confirmation is required from the statutory consultees that the numerous marine and coastal ecology surveys completed to date adequately cover the baseline assessment.

j) There are gaps in the baseline, methodology and proposed further studies for the air quality assessment (as identified in the Technical Evaluation Report) that should be addressed in the next stage of the assessment to provide transparency and a thorough assessment.

k) Whilst the data on radiological effects provides a degree of confidence that surveys completed and ongoing will provide sufficient information it is recommended that the output from these studies be included in full and confirmed at dose (critical group) limits below 20 µSv/y i.e. negligible.

l) There appears to be a description of mitigation and residual effects for the visual and landscape assessment without the full assessment being provided. If the full assessment has been completed then this should be made available, including any supporting drawings and plans.

m) To have a better understanding of the existing historic environment it is requested that all relevant archaeological data is provided.

8. Development Consent Application Documents

The authorities request that the issues identified above and in more detail within the Technical Evaluation Report are addressed as soon as possible through dialogue with the authorities and through submission of further technical documentation prior to the commencement of the stage 2 consultation. Ultimately the authorities expect that the full justification for the proposals presented, with evidence of engagement and involvement of the local authorities in the process, will be set out in the Development Consent Order application. The authorities are concerned that the Stage 1 Report does not describe the documents that EDF intend to submit with the Development Consent Order application. We would strongly advise that in addition to the documents that will need to be submitted (to accord with the provisions of the Planning Act 2008 and any associated regulations and guidance), such as an Environmental Statement and Consultation Report, that EDF submits to the IPC the following documents:

a) A full Transport Assessment and Travel Plan, including a transport assessment of the associated development and options that have been taken forward and rejected.

b) A Flood Risk Assessment

c) A Health Impact Assessment

d) A Construction Logistics Strategy

e) An Environmental Management Plan

f) Economic Assessment using the Sedgemoor District Council Checklist

g) A Procurement and Training Strategy summarised in an Employment and Skills Charter

h) A draft of a Development Consents Obligation.

1 Introduction

1.1 Approach

This technical evaluation of the Hinkley Point C Proposed Nuclear Development, Pre-Application Consultation Stage 1 document provides the response from Sedgemoor District Council and West Somerset Council to EDF's Stage 1 consultation request.

This evaluation addresses the technical adequacy of the Consultation document relating to the Hinkley Point C Built Development and Southern Construction Areas; Off-Site Associated Development and observations on the Off-Site Associated Development Strategy; Preliminary Works; Sustainability; Community Benefits; Training and Procurement and Approach to Compulsory Purchase. These development proposals are not described in detail within this document and reference should be made to the Stage 1 Pre-Application Consultation document for further information. However, for completeness, the development proposals included in the Stage 1 document are described in brief below:

1.1.1 On-Site Proposals

- Main Power Station Buildings comprising the UK EPR nuclear reactor technology developed by EDF in partnership with Areva. This includes the reactor building; fuel building and nuclear auxiliary building. In addition, the conventional (non-nuclear) facilities such as the turbine hall and ancillary buildings;
- Supporting infrastructure to include cooling water tunnels and associated infrastructure, fuel and waste management facilities, transmission infrastructure, staff facilities, administration and storage;
- Preliminary Works to include land clearance and levelling, spoil storage, laydown areas as well as a Sea Wall constructed to incorporate the existing public footpath and a temporary aggregates jetty;
- Public information centre providing access for education;
- Security fencing and lighting;
- Access and parking provision;
- Transmission infrastructure including the removal or re-routing of existing overhead lines and new overhead lines;
- On-site Workers Accommodation / Campus

1.1.2 Off-Site Proposals

Off-Site Developments have been proposed by EDF in order to construct and operate the proposed new nuclear power station at Hinkley. These Off-Site proposals are summarised as follows:

- Cannington bypass (two route options proposed);
- Campus accommodation for construction workers (locations / options proposed);
- Park and ride facilities (locations / options proposed);
- Freight consolidation and storage facilities (locations / options proposed);
- Refurbishment of Combwich Wharf;
- Spoil disposal sites;
- Road improvement works and strengthening of culverts.

1.1.3 General Observations on Development Proposals

It is recognised that there are three distinct elements to the proposals, and that the Hinkley Point C and Associated Development elements will be ultimately addressed within an application to the Infrastructure Planning Commission (IPC); whilst aspects of the Preliminary Works are to be addressed within Town and Country Planning Act Applications and a Harbour Empowerment Order (for the proposed aggregates jetty). Further information on the management of these applications is contained within this Stage 1 evaluation.

Information has been derived from the Stage 1 Consultation document (including the Environmental Status Report) as well as (where appropriate) external reference material made available by EDF. Where external material has been utilised, this is identified within the technical evaluation.

2 Technical Evaluation (Hinkley Point C Built Development & Southern Construction Areas)

2.1 Introduction

This section of the review provides a technical evaluation of the Pre-Application Consultation Stage 1 Document for the Hinkley Point C Built Development and Southern Construction Areas. In particular, focus has been given to the Environmental Status Report (ESR) and accompanying drawings, which provides significant technical material supporting the Stage 1 Consultation process. It is recognised, at the outset, that there are technical limitations to the documentation which are a function of the design development and the available technical studies at this time. Where possible, reference made to free-standing supporting documentation has been included within the technical review below. However, where material has been referenced but not provided by EDF, we have made this explicit in the text. Each technical section describes the material contained within Appendix A.1 of the Stage 1 Consultation Document

2.2 Observations on the Hinkley Point C Development

In addition to the main power station, it is proposed that the Hinkley Point C site and southern construction site will host a range of associated temporary and permanent development (as summarised in section 1.1.1). The proposed siting of the Hinkley Point C nuclear power station is supported by the authorities and will be tested primarily through the preparation of the Nuclear National Policy Statement (NPS, EN-6) by the Government. Other more detailed matters, such as the layout of the site, means of access, and provision of temporary accommodation for construction workers, will need to be considered by the IPC as part of the Development Consent Order determination process. It is therefore appropriate for the authorities to comment on these aspects of the main site development during the Stage 1 Consultation.

Ahead of providing detailed comments on each of the topic areas covered by the ESR, there are a number of specific points that the authorities wish to highlight.

2.2.1 Masterplanning and Landscape Treatment

It is proposed that the layout of the Hinkley Point C development should be based on establishing clear longitudinal building lines which create a symmetrical relationship between the buildings and spaces (para. 3.2.5 of the Stage 1 Consultation document). Initial discussions between EDF, the Commission for Architecture and the Built Environment (CABE) and the authorities have highlighted that the impression and desire lines of the current design will only be effective from a very limited view point and that from all other areas the design will not have any positive impact within the wider landscape setting. Whilst the strict regulations regarding the location of key elements of the proposed Power Station will be the subject of consideration by other bodies, the overall design and its impact on the landscape of West Somerset is of concern to the authorities.

Figure 10.8 included within the Stage 1 Consultation document identifies that a visual and mitigation buffer is to be provided to the south of the construction site. In order to clarify whether or not this Buffer, in the view of the authorities, is appropriate it will be important to understand the scale of what is proposed and to assess the impacts that it will have on those residents living immediately adjacent to the site. Whilst the benefits of such a Buffer could be welcome, a more detailed understanding of the proposal and wider landscape plans are required.

It is recommended that further consultation is undertaken with the authorities, Stogursey Parish Council and the West Hinkley Action Group (residents of Shurton, Burton and Knighton) regarding the proposed site layout and landscaping proposals.

2.2.2 Site Access

Initial concern is expressed on the appropriateness of the Alternative Site Emergency Access/Egress Road. The proposed road is off an extremely narrow lane which cannot accommodate anything other than minor traffic movements because of its width and alignment. Should traffic movements be impossible along the C182 for any period of time, the proposed road will be the only access and travel along other local, substandard roads will be required. Further discussions on the suitability of this access road will be required between EDF, West Somerset Council and the County Council as Highways Authority.

Building on the above point, the use of the C182 for an increasing number of purposes highlights the need to consider the suitability of the emergency access road, the C182 and junctions for their future role. The road network will be required to provide the main access road to the Hinkley 'A' and 'B' sites, the construction site access for Hinkley 'C', the route for all coaches from park and ride sites and freight consolidation sites, as well as the route for outages and abnormal loads transported from Combwich Wharf. Further discussions on the suitability of these roads taking account of the huge volume of traffic proposed will be required between EDF, the authorities and the County Council as Highways Authority.

2.2.3 Transmission Infrastructure

The details of what works are required to connect the proposed new 400kV substation to existing power lines are very limited and clearly this will require discussion between EDF and National Grid as the project continues. The authorities note that the area of study includes areas which are potentially very close to properties in the Hamlet of Wick. Further consultation with West Somerset Council and Stogursey Parish Council is required as and when more detailed proposals emerge to ensure that these properties will not be significantly affected.

2.2.4 Land Use Requirements for Construction – Spoil Storage

Whilst the topsoil stripping, site levelling and spoil storage works are likely to form part of the preliminary works proposals that will be submitted to West Somerset Council, concern is expressed over the lack of information available on the extent of soil/spoil storage proposed to take place within the vicinity of residential properties. Further consultation with West Somerset Council, Stogursey Parish Council and the West Hinkley Action Group (residents of Shurton, Burton and Knighton) regarding this element of the proposals is required.

2.2.5 Workers' Accommodation Campus

With respect to the provision of construction workers accommodation on-site, initial concern is expressed over the number of workers that are proposed to be housed on site (700 bed spaces) on the basis that the site lies in a isolated position well away from amenities which would be able to support such a drastic increase in the population in this area. A much greater understanding of the facilities and operation of the campus is required before the authorities can confirm whether or not it considers this level of on-site accommodation to be suitable. Whilst it is appreciated that a level of facilities could be provided on site to occupy workers before and after a normal working day, a clear understanding of what can be expected on 'non' work days will also be required for this isolated area.

More detailed comments on the EDF accommodation strategy are provided in section 3.2.4, which sets out a preference for residential development in Sedgemoor to be concentrated in Bridgwater; and for a dispersed strategy to be applied in West Somerset. The provision of 700 bedspaces on-site, the highest concentration of workers proposed in the Stage 1 consultation, does not align with the authorities' preferred distribution for residential development. The Council accepts, to a certain extent, that some personnel will need to be based on site for safety and security reasons. The potential benefits of locating a proportion of construction workers on site, such as reduced traffic movements, are also recognised. Nevertheless, a robust examination of the exact worker numbers and service requirements

would need to take place before the authorities would be prepared to support the level of accommodation currently proposed.

The accommodation of significant numbers of construction workers and services on-site in temporary structures would negate the potential for legacy uses, as full restoration and landscape enhancement of the southern construction site is considered the only appropriate option post-construction. Whilst in other areas the Councils are keen to explore legacy uses for proposed accommodation, this is not the case with any accommodation to be provided on site. The proposed scenario of a large scale on-site construction campus is therefore considered to represent an inefficient investment in infrastructure, which offers very limited legacy gains for the local community. For these reasons the authorities would welcome the opportunity to discuss the distribution of construction workers and accommodation strategy in further detail with EDF Energy.

2.2.6 Public Rights of Way

Initial concern is expressed regarding the lack of information available on the extent of rights of way closure and diversion (either temporary or permanent) that EDF are proposing as part of the preliminary works and the main site works. Clearly any such closures or diversions will need to be carefully considered and minimised where possible. The Stage 1 Consultation document identifies that the local Public Rights of Way (PRoW) network is used mostly by local residents, often for dog walking (ESR, para 3.16.10). Retained use of a well linked series of footpaths is therefore considered to be of importance for local residents. Further discussions on the proposals for rights of way need to be the subject of detailed discussion between the authorities and the County Council as Highways Authority.

2.3 Geology, Soils and Land Use (Section 3.1)

2.3.1 Adequacy of Baseline

In general terms, the baseline description is appropriate for the Stage 1 Consultation process. The solid geology, drift deposits and made ground descriptions are adequate and the structural geological description is concise but clear. Soil and Land Use sections of this baseline are described in an appropriate level of detail to build up a conceptual view of the baseline conditions at the site.

2.3.1.1 Recommended Additions to Baseline

It would considerably aid the baseline material were a comment to be included on the anticipated thickness of the geological strata (it is considered this material should already be available to EDF). Furthermore, a summary of the geological data and geophysical investigations which have taken place as well as an accompanying map of the locations of these investigations would be recommended.

2.3.2 Comments on Terms of Reference and Guidance

This is considered to be inadequate with few references provided within the text. It is recommended that a list of geological maps be included; a reference list of previous reports and other sources of information used for the assessment as well as a complete list of relevant regulations; legislation and other documents which will be material to the assessment as the Stage 1 Consultation process develops towards Stage 2.

2.3.3 Comments on Consultation to Date

Although the section makes reference to the consultation activity undertaken with Natural England, no details are provided as to their comments to date (nor how those comments have been addressed within the ESR to date). Whilst it is understood that consultations have been conducted with the Environment Agency (EA); Sedgemoor District and West Somerset Councils and Somerset County Council, there is limited evidence of this consultation within the section. Furthermore, detailing engagement with the British Geology Society (BGS) would be recommended, particularly as this relates to the Regionally Important Geological Sites (RIGS).

2.3.4 Comments on Proposed Studies

Whilst information is provided in broad terms regarding planned geological and geotechnical intrusive investigations, no details are provided so the adequacy of these approaches cannot be assessed. This presents an important omission as the inclusion of details on future planned intrusive investigation will be a key feature in establishing confidence of an appropriate degree of site due diligence.

2.3.5 Comments on Graphical Material

Figure 3.1.3 refers to alluvial deposits in the valley, which are shown on Figure 3.1 (although alluvium is not shown in figure). In addition, this figure needs to illustrate the mapping of drift and made ground deposits. Section 3.1.5 refers to the “jetty” shown on Figure 3.2 although this is inadequately labelled.

2.3.6 Further Comments on Adequacy of Data

Outline information regarding mitigation measures is not provided for this section, although there is such information noted in section 3.3 on Hydrogeology. It is recommended that the sections are consistent and include an appropriate level of detail on mitigation (or where details are not yet available, this is stated in the relevant section to avoid uncertainty).

2.4 Land Contamination and Waste (Section 3.2)

2.4.1 Adequacy of Baseline

Whilst the baseline section is adequate and appropriate to this stage of design, a commentary on ground gas would be expected. Furthermore, whilst the title in the contents page to the ESR refers to “Land Contamination And Waste” the section itself is entitled,” Land Contamination” and waste matters are not addressed in this section. This oversight should be corrected.

2.4.1.1 Recommended Additions to Baseline

To a large extent the recommended additions centre around source data. It is recommended that a list be provided of all source data i.e. which historical maps were reviewed. It is anticipated that previous ground investigations were reviewed, in combination with Hinkley Point B construction records. However, these are currently not referenced.

The inclusion of an exploratory location map of existing and proposed ground investigation points and a summary of data would aid the navigation of this section.

Section 3.2.4 refers to desk based studies of past and present land use but does not identify a source for these data. References should thus be included. In addition, section 3.2.6 would benefit through inclusion of the depths of trial trenches and a summary table of chemical analysis should be provided. Section 3.2.8 would benefit from the inclusion of a summary of the radiological levels including a range of levels recorded and background levels. Finally, the baseline section should also include a list of the relevant regulations, legislations and other documents that will be reviewed during the development towards Stage 2.

2.4.2 Comments on Terms of Reference and Guidance

Limited references are currently provided and this section is judged to be inadequate. A list of references including previous investigations, radiological walkover and baseline data sources should be provided and these should be cross referenced to the text including text in other supporting documents.

2.4.3 Comments on Consultation to Date

Consultation details are currently absent around this particular technical section with the exception of some details in “Hinkley Point Final SOCC November 2009” although this does not include consultation with the regulators in terms of contamination. It is strongly

recommended that the consultation process around this particular section with the relevant statutory bodies, e.g. the EA and the HSE as well as Sedgemoor District and West Somerset Councils and Somerset County Council and non-governmental organisations, be detailed in full.

2.4.4 Comments on Proposed Studies

It is understood that further Phase 2 intrusive investigation is planned, although no details are provided regarding the scope and timing of this investigation. This should be included to allow commentary to be made on its adequacy.

Whilst the land contamination section adequately identifies potential *existing* contamination and how this should be considered, there is no reference to identifying *potential* contamination created during the construction, operational and decommissioning phases of the proposed Hinkley Point C. A general statement explaining how these impacts will be addressed and mitigated should be included in the proposed studies section.

Consideration of non-radioactive and radioactive waste needs to be addressed and the long term impact on human health and the environment as a result of such proposals. The future studies setting out this evaluation should be included within this section.

Long term impacts of waste and waste transfers have not been identified and the cumulative contamination and waste issues have not been identified. It is noted that cumulative impacts of the overlapping operational phase of Hinkley B and Hinkley C will be considered as given in Section 5.2 of the Appendices. This needs to be cross-referenced in section 3.2. The methodology to be employed to assess the cumulative impacts of the decommissioning of Hinkley Point B, estimated 2016, needs to be included.

Decommissioning of the proposed power station is not mentioned in this section although it is noted in Section 5.4 that decommissioning of Hinkley Point C is not being considered as part of the study at this time. This needs to be mentioned in section 3.2 and cross-referenced.

2.4.5 Comments on Graphical Material

There is no graphical material supporting this section.

2.4.6 Further Comments on Adequacy of Data

Outline information regarding mitigation measures is not provided for this section, although this has been included in section 3.3 on Hydrogeology. The sections should be consistent or if data is unavailable at this time, the reason should be stated.

2.5 Hydrogeology (Section 3.3)

2.5.1 Adequacy of Baseline

The material included in this section is judged to be adequate and includes a full and clear description of the baseline conditions in terms of hydrogeology.

2.5.1.1 Recommended Additions to Baseline

Further details regarding the long term monitoring would be recommended in this section, such as the number of monitoring points and locations and this should be supported by a map showing the locations of this monitoring. It is recommended that a comment be included on the chemical and radiological analysis of the surrounding groundwater and surface waters.

2.5.2 Comments on Terms of Reference and Guidance

The terms of reference for the assessment and guidance used is not documented fully with few references being provided. It is strongly recommended that references to geological sources e.g. geology maps as well as a list of the historical maps reviewed and a reference for rainfall data to be used is added.

2.5.3 Comments on Consultation to Date

No details are provided in this section referring to consultation activity to date, nor that which is proposed relating to hydrogeology. Consultation with the relevant statutory bodies should be detailed in full, including that with the EA in terms of groundwater dewatering, discharge and licensing.

2.5.4 Comments on Proposed Studies

Intrusive site investigations are in-progress or planned in the "Built Development Area" and the "Southern Area". Groundwater level monitoring is proposed in "Southern Area". Within this Stage 1 Consultation document the details of these proposed investigations and monitoring are not given and these should be detailed in full to allow a commentary on adequacy to be made. Disposal of discharged waters from the dewatering process are not listed as a key issue within this section and this should be included with future assessment regime.

2.5.5 Comments on Graphical Material

No graphical material was included with this section.

2.5.6 Further Comments on Adequacy of Data

Outline information regarding mitigation measures is provided for this section, and this is an appropriate addition. This should be cross-referenced for mitigation developed in sections 3.1 and 3.2.

2.6 Hydrology, Drainage and Flood Risk (Section 3.4)

2.6.1 Adequacy of Baseline

The descriptions of watercourses are largely in narrative form which makes the review confusing. This should be supplemented with accompanying drawings. A brief description of topography may also aid understanding in relation to drainage and flood risk.

There is currently no baseline description of groundwater although factors relevant to groundwater are described 3.4.9. This is a significant omission and should be rectified approaching Stage 2.

There is currently no reference to Stogursey in the baseline section although this is identified as requiring specific flood protection in section 3.4.12. The Flood Risk Assessment is currently underway and without its inclusion, comments on the adequacy of flood evaluation are problematic.

Under section b) *'Assessment Studies'* there is a description of a wide range of investigations that have been carried out or are underway. However, this information does not appear to have been included or referenced in the baseline section and does not feature in the identification of *'Key Issues'* later in this section.

There are occasional typographical errors in this element of the baseline including section 3.4.2 where 'is' and 'are' are used interchangeably.

2.6.1.1 Recommended Additions to Baseline

It is strongly recommended that hydrological features be described in accompanying mapping as well as narrative to enhance understanding of their relative location and distribution to the proposed Hinkley C. Furthermore, it would be expected that a baseline description of groundwater conditions be included as well as the flood related issues around Stogursey. Further reference and value of ongoing studies should be included in the baseline section, identifying existing data shortfalls and how these are to be addressed within the further study.

2.6.2 Comments on Terms of Reference and Guidance

References included within this section are generally complete although further evidence of source data, particularly reference to free-standing documentation in related sections should

be included within the narrative. The extreme sea water level analysis mentioned in section 3.4.15 should be fully referenced allowing access to the source data.

2.6.3 Comments on Consultation to Date

In common with other aspects of the ESR, this section provides a description of the consultation completed to date in a table only. The way in which this has been considered in developing the future study strategy should be detailed in full.

2.6.4 Comments on Proposed Studies

A Flood Risk Assessment is in progress and is referred to as the key document in terms of understanding the hydrology, drainage and flood risk issues affecting the area. Given that this has yet to be included it is difficult to comment fully on the adequacy of baseline material. The inclusion of this study is considered imperative in the future issue of the data. There is limited information on the scope and methodology of the Flood Risk Assessment and this should also be included in full.

It would appear that the *'Key Issues'* identified in section c) are complete and attach an appropriate degree of importance to the Flood Risk Assessment in particular.

Mitigation proposals are discussed in various aspects of this section, including around proposed studies which leads to confusion. It would enhance understanding were this to be described in a separate section.

Full reference should be taken into account of the Strategic Flood Risk Assessment (SFRA) for Sedgemoor and the Local Development Framework (LDF), and the agreed strategic flood defence solution, the Parrett Barrier. The impact of any works to the Parrett will need to consider the impact on the barrier. Any development within the flood risk areas will trigger a contribution toward the delivery of the Barrier.

Account should also be taken of the Shoreline Management Plan and Environment Agency studies on the Parrett, and notably the Steart Managed Realignment Project. As a strategic environmental project for the Severn Estuary there is an expectation from the Environment Agency, Sedgemoor District Council and other partners that EDF will work as part of the project to enhance and enable its delivery, given its proximity to the site and close relationship with Combwich and the Parrett.

2.6.5 Comments on Graphical Material

Graphical material provided in support of this section is considered inadequate as it lacks clarity at the scale required to cross-reference with the accompanying text.

2.6.6 Further Comments on Adequacy of Data

The lack of raw data being presented within this section makes it difficult to understand the development of the baseline understanding and therefore the future proposed survey schedule. Where the section lacks clarity in explaining the baseline conditions this can readily be resolved through the addition of a larger scale drawing as a reference and describing where features such as Stogursey are situated relative to the proposals.

On occasion, the *'Assessment Studies'* section is presented in such a way that makes some of the data appear irrelevant to the preceding narrative. This requires further editorial review.

All *'Key Issues'* appear to have been identified within this section but they are rarely linked with a solution or mitigation strategy and reference to these issues and the future programme of survey is recommended.

2.7 Fresh Water Quality (Section 3.5)

2.7.1 Adequacy of Baseline

A full and clear description of the baseline conditions in terms of water quality in existing surface and groundwater features is provided in this section. There would be considerable benefit in a closer narrative between this section and the preceding section on hydrology, drainage and flood risk.

2.7.1.1 Recommended Additions to Baseline

In common with the preceding section, the fresh water quality description would be enhanced through the addition of more detailed drawings (preferably at a minimum scale of A3).

2.7.2 Comments on Terms of Reference and Guidance

Whilst the terms of reference and guidance documents included in this section are generally regarded as adequate, there would be value in including reference to Planning Policy Statement (PPS) 23: *Planning and Pollution Control*; CIRIA C697: *The SUDs Manual* and a full reference for the Tier 1 groundwater risk assessment. The inclusion of this raw material would assist in understanding the baseline conditions of this and the preceding section.

2.7.3 Comments on Consultation to Date

Consultation data is included in tabulated format but there is limited information on how this consultation has shaped the understanding of baseline conditions and established the approach to future studies. It is recommended that further data be included on the consultations to date including the original exchange of correspondence (where possible).

2.7.4 Comments on Proposed Studies

A groundwater quality monitoring and sampling campaign is proposed for the eastern built development area and the southern construction area. This is a necessary addition to the baseline information and should be cross-referenced to the preceding section on Hydrology, Drainage and Flood Risk.

2.7.5 Comments on Graphical Material

Graphical material provided in support of this section is judged inadequate as it lacks clarity at the scale required to cross-reference with the text. Further, more detailed drawings are recommended.

2.7.6 Further Comments on Adequacy of Data

In general terms, this section is presented in a clear, concise and understandable manner although an A3 drawing of locations would be substantially helpful.

2.8 Marine Water and Sediment Quality (Section 3.6)

2.8.1 Adequacy of Baseline

The baseline section can be considered only partially complete owing to results for chemical (non-radiological) determinants for sediment quality being outstanding. However, the existing water quality for radiological and non-radiological determinants is reported adequately.

The majority of the text devoted to this section is related to the potential impacts of cooling water infrastructure associated with the main power plant. There is thus limited commentary on the temporary aggregates jetty, dredging and new sea wall. It is understood that these items are being addressed through a Harbour Empowerment Order (HEO)[1] and Town and Country Planning Act 1990 applications in advance of the main Development Consent Order (DCO) process for the main power plant. As such, it might be expected that further detail be

[1] Pursuant to the Harbours Act 1964

available on these elements of the proposals in the Stage 1 Consultation process. This is a significant omission.

The baseline description makes limited reference to thermal plume modelling and the details of this should be provided.

The baseline description includes confusing text *'....proposed dredging and other off-shore and cross-shore construction activities will be assessed in the context of both current and historical studies in the area.'* Without a definition of 'studies' and 'area', this suggests a desk based assessment approach, which limits collection of real data and quantitative analysis. This would represent a significant omission.

Further details are required in the baseline section on the assessment methodology, particularly relating to the jetty, dredging and sea wall. Without this detail it is not possible to confirm the adequacy of approach at this time.

2.8.1.1 Recommended Additions to Baseline

There is a significant omission at present around the proposed temporary aggregates jetty, dredging and sea wall will be assessed and these clearly have implications for marine water and sediment quality assessment. It is also strongly recommended that a future programme of numerical modelling of coastal processes be undertaken and detailed within the Stage 2 consultation process (to include wave, tide and sediment transport).

Whilst there is adequate identification of water and sediment quality issues, more detail is required on sediment disturbance and contaminant mobilisation contribution to overall water quality in the baseline section.

2.8.2 Comments on Terms of Reference and Guidance

Whilst terms of reference are generally regarded as adequate in terms of being an introduction to the environmental assessment process considerably more detail is anticipated as the document develops towards Stage 2. Further reference should be made to the documents to be developed in parallel with the Stage 1 Consultation including Environmental Impact Assessment Scoping Reports for *Preliminary Works*. Within the ESR, and in particular associated with marine evaluation, there is some uncertainty as to how the Stage 1 Consultation document should be considered alongside the approach to planning applications and the planning documentation that will be produced for each element (particularly the Preliminary Works).

Primary references (or a detailed review of reference) will need to be supplied in the Stage 2 Document to consider their appropriateness e.g. Langston et al. (2007) on marine sediment quality. Full text on background studies is recommended and there should be clear references (with document numbers, dates etc) of hydraulic modelling and data collection reports used in assessing water and sediment quality.

2.8.3 Comments on Consultation to Date

No specific consultation is detailed on this particular environmental topic. It is possible that formal consultations have been undertaken (in addition to the Marine Authority Liaison Group) and these should be detailed in full in this section. This is an important omission and should be tied into the baseline description and well as setting out the approach to future surveys.

2.8.4 Comments on Proposed Studies

There is currently very limited data on the description and assessment methodology of the construction of the jetty, new sea wall, cooling water intakes and outfalls, and refurbishment of Combwich Wharf (although it is acknowledged that these elements are given some prominence in Section 4.). Further information is required on proposed studies in order for a fuller commentary to be made.

Proposed water quality modelling does not appear to be examining changes in sediment quality and how existing (potentially contaminated) bed material will be raised into suspension and transported. Although the 'background' suspended sediment concentration is relatively high, the localised inputs and pathways need to be understood. Sediment transport modelling may be required for specific project elements including the jetty and sea wall. It is recommended that further information on the proposed methodology is provided, expanding on use of previous studies, in order to confirm numerical modelling activities. The approach to thermal discharge modelling is acknowledged in this section.

Confirmation is required under this section as to whether consideration has been given to monitoring suspended sediment levels from pre-construction through to post-construction of jetty (including dredging), sea wall and cooling water infrastructure.

2.8.5 Comments on Graphical Material

No specific graphical material has been included for this topic and there is thus very limited information presented in Consultation document relating to Marine Water and Sediment Quality.

2.8.6 Further Comments on Adequacy of Data

Currently, there is a relative paucity of detail provided on the assessment methodology for the sea wall, temporary aggregate jetty 'construction activity' and refurbishment of Combwich Wharf (although this is noted as being included in brief in section 4). Greater detail should be provided on cooling water intakes and outfalls. The document is currently focused on Hinkley Point C as a whole; however, the significance of individual project elements, e.g. the proposed new jetty, as a 'project' in its own right should be recognised. The temporary aggregates jetty, for example, appears to be viewed as an essential part of the construction methodology. The inclusion of numerical modelling and monitoring is strongly recommended.

2.9 Hydrodynamics and Coastal Geomorphology (Section 3.7)

2.9.1 Adequacy of Baseline

Whilst the description of the baseline is generally adequate, there is currently very limited detail on the assessment methodology to derive this baseline. Hydraulic numerical modelling has taken place for cooling water studies only and it would appear that currently no modelling of coastal processes has been undertaken (nor is it intended). The approach to modelling should be confirmed. Further detail is also required on the hydraulic models identified in section 3.7.8 and how they will be used to *'support...engineering design studies and...environmental assessment'*. Models are assumed to be capable of assessing changes in water flow and level only. There is also some uncertainty on how the wave data acquired from the Waverider buoy will be utilised and this should be detailed.

The description of the proposed jetty construction and operation is inadequate. The sea wall and cooling water works are identified as *'the most significant structures to be introduced to the marine area'*. Although, the jetty is proposed to be an open piled structure (rather than solid), its proposed dimensions, construction and design life (10 year plus), mean this is also a significant structure. It should be demonstrated that it is insignificant.

Whilst the description of climate change effects is generally adequate, this assumes that the parameters identified in section 3.7.3 will be addressed. EDF should also consider wave climate (direction) changes, including angle of approach to the shoreline, wave reflectivity and overtopping.

2.9.1.1 Recommended Additions to Baseline

Additions to the baseline include details on how the jetty, dredging and sea wall will be assessed and there should be an allowance for numerical modelling of waves, tides and sediment transport for the Stage 2 Document.

2.9.2 Comments on Terms of Reference and Guidance

This section is considered to be adequate in terms of being an introduction to the project and the assessment of hydrodynamics and coastal geomorphology issues. Further detail is required in the parallel environmental information to support the planning process for the various elements of the scheme. The purpose of the Consultation document in the context of the approach to planning applications and the planning documentation that will be produced for each element, e.g. jetty, needs to be clearly stated.

2.9.3 Comments on Consultation to Date

The effect that individual consultation processes have had on the baseline and future proposed studies should be stated in full in this section. This is currently absent.

2.9.4 Comments on Proposed Studies

The Stage 1 Consultation Document does not indicate that any further studies are proposed at this time. It would be expected that more detail be provided on preliminary works aspects of the proposals including construction of the jetty, new sea wall, cooling water intakes and outfalls, and refurbishment of Combwich Wharf. However, there is currently a lack of information on these elements, particularly the jetty and sea wall.

It is anticipated that numerical modelling of waves, tides and sediment transport will be undertaken but this is not specified within the Consultation document. It is recommended that further information is provided on the assessment methodology including details of the approach to numerical modelling.

2.9.5 Comments on Graphical Material

No specific graphical material was produced for this environmental topic area. Limited information has been presented in the Consultation document with broad indicative locations only available at this stage. This makes any substantive observations difficult at this stage.

2.9.6 Further Comments on Adequacy of Data

The reasons for the absence of further studies, particularly numerical modelling of coastal processes, should be confirmed. EDF should allow for numerical modelling of coastal processes as a method of quantifying predicted changes.

There is an absence of detail on the sea wall, temporary aggregate jetty ‘construction activity’ and refurbishment of Combwich Wharf. There is a little more detail provided on cooling water intakes and outfalls. The document is focused on Hinkley Point C as a whole and the significance of the individual project elements are often overlooked. The temporary aggregates jetty, for example, could be viewed simply as a necessary step in the construction methodology. However, this undervalues the significance of this element as a ‘project’ in its own right.

2.10 Terrestrial Flora and Fauna (Section 3.8)

2.10.1 Adequacy of Baseline

All designated nature conservation sites of international and national importance respectively within 10km and 2km of the Built Development Area and Southern Construction Area should be described in combination with the resource value. Limited information has been provided on the national and local designations, and neither Blue Anchor to Lilstock Coast SSSI, nor Bridgwater Bay SSSI are described in sufficient detail. Furthermore, limited information has been provided on local statutory designations.

Information should be included on the Steart Managed Realignment Project, associated with Bristol Container Port, and the planned habitat creation for the provision of bird populations.

2.10.1.1 Recommended Additions to Baseline

In respect of the Bridgwater Bay National Nature Reserve it is recommended that a brief description be included on this ecosystem resource to the public. In addition, for the Severn Estuary Special Area for Conservation a brief description of the qualifying inter-tidal habitats which are adjacent to the Built Development Area that support important bird populations should be included and cross-referenced to section 3.9.

The potential impact of lighting the proposed jetty on important bird populations should be evaluated and the potential impact of the proposed overhead power lines on important bird populations should also be assessed.

2.10.2 Comments on Terms of Reference and Guidance

It is currently unclear as to how the findings of the badger survey will be made available. It is recommended that the findings of the badger survey be included within in a restricted access appendix in accordance with the provisions of the Protection of Badgers Act 1992.

2.10.3 Comments on Consultation to Date

The key stakeholders have been consulted and there is commitment for ongoing dialogue with them throughout the assessment process, which is appropriate.

2.10.4 Comments on Proposed Studies

An extensive range of terrestrial ecology surveys have been undertaken. However, the report needs to state whether the statutory consultees agree that no further surveys are required to inform the assessment. The reports should be made available in full.

2.10.5 Comments on Graphical Material

A drawing should be prepared to include non-statutory designated nature conservation sites, including Hinkley County Wildlife Site.

2.10.6 Further Comments on Adequacy of Data

As noted above, further work is required to make the baseline information more robust, particularly with regard to designated nature conservation sites and qualifying ecological features of importance. Confirmation is required from the statutory consultees that the terrestrial ecology surveys completed to date are suitable to inform the baseline for assessment.

2.11 Marine and Coastal Flora and Fauna (Section 3.9)

2.11.1 Adequacy of Baseline

There is an adequate description of the International Conservation designations and the identification of relevant habitats and species associated with the designations in this section. It is clear that *Sabellaria* and *Corallina* species are of considerable ecological value and their importance is noted. However, no information has been provided on the national and local designations, particularly Blue Anchor to Lilstock Coast SSSI, nor Bridgwater Bay SSSI. Furthermore, no information has been provided on local statutory designations.

2.11.1.1 Recommended Additions to Baseline

Information, including a background description should be provided on Blue Anchor to Lilstock Coast and Bridgwater SSSIs. For the Bridgwater Bay NNR a brief description of the designated habitats and species should be included, if not addressed by the description of the SAC and SPA designation.

The geomorphological value of the shore platform also needs to be recognised (specifically relating to the SSSI designations) and the potential effects of lighting upon bird species should be evaluated.

2.11.2 Comments on Terms of Reference and Guidance

There is more detail in this section of the ESR of the Consultation document, compared to sections 3.6 and 3.7, on how the jetty, new sea wall, cooling water intakes and outfalls may impact on marine and coastal flora and fauna and this is a necessary addition.

2.11.3 Comments on Consultation to Date

The purpose of the Consultation document, in the context of the approach to planning applications and forthcoming planning documentation needs to be clearly stated. This will help explain the level of detail on environmental topics provided in the ESR. At present, there is limited direct reference to topic specific consultation with statutory authorities.

2.11.4 Comments on Proposed Studies

An extensive list of studies has already been completed or is in progress. Therefore, the studies proposed are adequate, on the assumption that the statutory consultees agree that these surveys are required to inform the assessment. The baseline surveys should confirm all locations of *Sabellaria* and *Corallina* that are within the offshore works footprint and those outside that may be affected by construction of the offshore works.

2.11.5 Comments on Graphical Material

Within Figure 10.3 it would be helpful to have the sites named of the international statutory designations e.g. Severn Estuary SAC. Furthermore, in Figure 10.4 it would be helpful to have the sites named of the national statutory designations e.g. Bridgwater Bay SSSI.

There is generally very limited information presented in Consultation document by way of graphical data which makes substantive comments difficult.

2.11.6 Further Comments on Adequacy of Data

Some further detail is required on national conservation designations and the qualifying ecological features of importance. Confirmation is also required from the statutory consultees that the numerous marine and coastal ecology surveys completed to date adequately cover the baseline assessment.

2.12 Transportation (Section 3.10)

2.12.1 Adequacy of Baseline

In general terms the description of transportation is inadequate with limited reference to supporting data. Although partially referenced in the relevant parts of section 4, there is limited information on the transport network performance / congestion and safety related issues in this section. Information and cross-referencing to section 4 in this section 3.10 is inadequate or incomplete with baseline data not presented for the Cannington Bypass; M5 junction 23; accommodation campuses in Bridgwater and Williton included neither here nor in section 4. Section 3.10.16 states that preliminary modelling has indicated that a bypass around Bridgwater is unlikely to be warranted.

There is no justification given for this assertion and it is too important to base such a significant decision on early and very limited modelling. The very same modelling indicated no Cannington Bypass was required, but it has been proposed all the same. Full and robust assessment of the traffic conditions will be required when the main model is in place. The modelling scenarios will need to be agreed with the planning as well as the transport authorities.

Sensitivity testing will be required using different modelling assumptions from the socio-economic model. The modelling assumptions should also build in the proposals within the Bridgwater Challenge Vision, and these will affect capacity. Detailed assessment of the performance of individual junctions will be required.

Furthermore, in section 3.10.23 this is uncertainty as to whether the journey time assumptions underpinning the socio-economic work by Oxford Brookes have been agreed.

There are also questions over the high % attraction from North Devon and the peak hour journey times which should be resolved.

Section 3.10.24 describes the use of Sizewell in Suffolk and Flamanville in Normandy as an appropriate basis for assessing construction vehicle movements for Hinkley Point C. There is no confirmation that this has been agreed as an appropriate reference case. Section 3.10.27 under the suite of transport measures omits shuttle buses from the accommodation campuses to Hinkley C and public transport, cycling and walking enhancements to cater for recreational trips from accommodation centres in Bridgwater and Cannington. Within the descriptions of Preliminary Works there is an indication of a new access roads and internal roads although it is not stated if changes are required to the Hinkley main site access. Further issues around baseline (particularly for off-site associated development) are described in Chapter 8 of this report following.

2.12.1.1 Recommended Additions to Baseline

It is recommend that baseline information on existing junction performance and accident analysis is presented in this section. Furthermore, information on committed development and programmed transport schemes should be presented in this section.

2.12.2 Comments on Terms of Reference and Guidance

Within section 3.10.10 the extent of the highway network to be included in the assessment of transport impacts is not clearly described. In particular, there is considerable uncertainty over which additional M5 junctions the Highways Agency has requested be included in the assessment.

2.12.3 Comments on Consultation to Date

There is limited reference to the role that consultation has played in the review of transportation data, either by informing baseline or by setting the context for future studies. Sedgemoor District Council is required to be a key consultee on transport, as advised by DECC in their environmental scoping opinion. To date engagement has been limited and the Council has been excluded from some key meetings. As the planning authority primarily affected this is not considered acceptable.

2.12.4 Comments on Proposed Studies

There is a general lack of information about when further analysis will be completed and made available (e.g. 3.10.17 modelling and accident analysis). Under section 3.10.15 the extent of coverage of the PARAMICS and SATURN models is not defined.

There is no mention of an assessment of local transport needs, in particular public transport, cycle and pedestrian enhancements to provide for leisure / recreation trips generated by staff in accommodation campuses.

There is no mention of how the proposals will integrate with the delivery of the Bridgwater Vision and its transport proposals, or integrate with the Local Development Framework (LDF) Infrastructure Delivery Plan.

2.12.5 Comments on Graphical Material

A map should be included in this section showing the extent of the highway assessment area and the areas of coverage of SATURN and PARAMICS models. Higher resolution graphics are desirable and provision should be made for detailed drawings to be produced.

2.12.6 Further Comments on Adequacy of Data

Our primary issues on adequacy of data centre around off-site associated infrastructure and are described in Chapter 8. In brief, these include the rationale / catchment for a 200 capacity accommodation campus at Cannington South being absent; and the rationale for a freight consolidation centre at Cannington South also absent. In particular, there is limited information on what this location offers that is not available next to the M5 J23 or J24 at

Bridgwater. Furthermore, the rationale for a Campus or Park and Ride site at Williton is not presented.

Whilst section 3.10 describes the data collected (albeit without specific details of locations) it does not describe the results of the analysis (e.g. preliminary accident analysis is incomplete).

There is a lack of rationale for the locations and scale of several of the Associated Developments, in particular accommodation campuses and the Cannington South freight consolidation centre.

There is insufficient justification given for the omission of a Bridgwater bypass. The associated developments omit public transport, cycling and pedestrian enhancements to serve local transport needs of the accommodation campuses in Bridgwater and Cannington.

The authorities are mindful of the increased traffic along the A39 that could result from the Hinkley Point C proposals and would, along with Somerset County Council, wish to explore improvements to this road between Williton and Bridgwater that could be required to facilitate EDF's proposals.

2.13 Noise and Vibration (Section 3.11)

2.13.1 Adequacy of Baseline

The noise sensitive receptors shown generally appear representative of the areas from which it would be expected evaluation be conducted. However, there is no graphical indication of the location of the receptor at Riverside, Combwich. The inclusion of single figure noise levels (rather than a range) for evening and night at three locations suggest single measurement or small measurement samples which should be addressed through further on-site evaluation / monitoring. There is a data shortfall around Riverside, Combwich where evening and night-time noise levels were not determined. Further details would be expected around noise survey including the indication of time periods measured to ensure validity of approach.

2.13.1.1 Recommended Additions to Baseline

Clarification should be provided on how much noise monitoring has been undertaken and if necessary, further baseline noise monitoring should be carried out. A description of the rationale for each noise monitoring location should be included. A description of the main noise sources at each monitoring location should be provided, particularly given some cases where night-time noise levels are higher than in the evening. It would be appropriate to set out the full noise monitoring methodology as agreed with the local authority Environmental Health Officers.

2.13.2 Comments on Terms of Reference and Guidance

The terms of reference cited for the study are generally adequate and included. However, there is little which indicates how the severity of impact has been determined. An objective reference scale should thus be included. There is currently no mention of BS5228: Noise and Vibration Control on Construction and Open Sites. A methodology should be included for calculation of noise from construction activities. Furthermore, a method for calculating noise propagation from operational activities should be detailed. In addition, a table showing what noise level constitutes an impact and how the severity is determined would be helpful in understanding conclusions reached within this chapter.

2.13.3 Comments on Consultation to Date

Baseline noise monitoring has been carried out although no information as to how the operational noise emissions have been calculated has been included, nor the underpinning agreements on approach through consultation. No information has been given about the method for deriving the night-time noise limit of 43dBL_{Aeq}. No daytime or evening noise limits have been given and no information about how the predicted noise level has been

assessed against the noise limit and how the severity of the impact has been determined has been included. Where consultation has guided the surveys and approach to date this should be detailed in full.

2.13.4 Comments on Proposed Studies

Section 3.11.7 states that an evaluation of the creation of a landscape barrier from topsoil is taking place but this is not included in table at paragraph 3.11.12. More certainty is required in this respect. Section 3.11.9 states that an assessment of operational noise emissions has been carried out but the table at section 3.11.12 states that modelling of noise sources during the operational phase of the development is planned or in progress. It is thus not clear what modelling has been undertaken to carry out the assessment.

Section 3.11.11 discusses controlling construction noise through Section 61 consent[2] and discusses potentially agreeing permissible noise levels. However, there is no indication that this approach has been agreed with the local authority Environmental Health Officers.

2.13.5 Comments on Graphical Material

No location has been shown for the noise receptor at Riverside, Combwich. There is a lack of clarity on Figure 3.9 making noise monitoring location numbers difficult to read. An enhanced plan addressing these issues should be produced.

2.13.6 Further Comments on Adequacy of Data

Whilst there is nothing to suggest that there would be any errors in the assessment there is currently insufficient information to understand how the assessment has been carried out and how the conclusions have been reached.

2.14 Air Quality (Section 3.12)

2.14.1 Adequacy of Baseline

It is stated that the Air Quality Strategy (AQS) defines objectives for air quality effects on vegetation and ecosystems but no information is provided on anticipated effects and management of impacts to sensitive designated sites/ ecological sites in the vicinity of the proposed scheme. Furthermore, relevant critical load levels and existing background nitrogen deposition and oxides of nitrogen (NOx) levels should be derived for these sensitive sites.

The main sources of air pollution in the study area have not been identified and there is currently limited context of other sources of air pollution within the vicinity of the proposed Hinkley C. It would also be beneficial to include more detail on on-site sources of pollution.

A survey to determine background nitrogen dioxide (NO_2) concentrations has been undertaken which is welcome as there is a general absence of data in the area. The baseline section provides background pollution data from the six month survey, however, no data are provided from the mapped background and this should be included.

2.14.1.1 Recommended Additions to Baseline

It is recommended that the desk study be complete to provide the missing baseline information highlighted above.

2.14.2 Comments on Terms of Reference and Guidance

An appropriate reference has been made to the relevant local authority air quality review and assessment documents; the UK Air Quality Archive; the Air Quality Strategy and Air Quality Regulations (2002); and Environment Agency (EA) guidance on regulated industry permitting.

It is considered that more specific information should be provided to clearly identify what guidance has been followed. There is no information on which local authority reports have

[2] Pursuant to the Control of Pollution Act 1974

been reviewed (i.e. progress report, updating and screening report; for which year). In addition, no information has been provided as to what specific EA guidance has been followed (i.e. H1 or other guidance). There is also no information on what guidance will be followed / used to determine the significance of potential effects (both operation and construction).

2.14.3 Comments on Consultation to Date

Consultation with local Environmental Health Officers has been undertaken and this is highlighted within the section. However, there is limited detail on the outcome of the consultation. In addition, there is no indication of consultation activities with the Environment Agency as it relates to air quality.

2.14.4 Comments on Proposed Studies

The construction assessment considered dust nuisance on a risk based approach. It was concluded that after mitigation any potential impacts would be minor. More detail is required to understand how these conclusions were derived. Although the impacts are probably minor, there is no detail on proposed mitigation measures.

It is stated that effects from exhaust emissions will be assessed once construction programme is available. No information is given on how this will be assessed, although it is likely that the impact will be minimal.

Operational effects have been assessed using dispersion modelling. Only one source of emissions has been included in the modelling. Cumulative effects should also be considered. There is some uncertainty as to why PM_{10} and $PM_{2.5}$ are not mentioned as being pollutants of concern during the operation of the plant.

Operational traffic/ Construction traffic will be assessed using ADMS Roads. It is considered that this approach would be appropriate. It is not clear whether an assessment of ecological sites will be carried out and this would be recommended.

2.14.5 Comments on Graphical Material

A plan illustrating monitoring locations and sensitive receptor locations and main construction haul roads once known is recommended.

2.14.6 Further Comments on Adequacy of Data

The air quality section identifies the key issues associated with the construction and operation of the main site in relation to air quality. However, there are gaps in the baseline, methodology and proposed further studies that should be addressed in the next stage of the assessment to provide transparency and a thorough assessment.

2.15 Radiological Effects (Section 3.13)

2.15.1 Adequacy of Baseline

Whilst the extracts relating to Hinkley from the Radioactivity in Food and the Environment (RIFE) study are welcome, it would be useful to include this report in full as a technical annex. It would be expected that information be made available in this section from the Generic Design Assessment (GDA) process on potential doses to human and non-human species from operation of EPR.

The addition of radionuclide concentration studies in marine waters, groundwater, surface freshwater and shallow and deeper soils is welcome. It is assumed that samples have been analysed for gamma spectroscopy / spectrometry; gross beta; gross alpha; tritium and carbon-14 although this is not specifically referenced within this section.

Limited reference has been made to methodology or reference criteria within this section. Furthermore, it is unclear whether radiological baseline information has been accessed from the existing A and B Station. In addition, information on the results of sampling is referenced as being included in sections 3.2, 3.5 and 3.6 although only limited data is included in these

respective sections. Reference to public does limits should be included within this section as well as sections 3.2; 3.5 and 3.6.

2.15.1.1 Recommended Additions to Baseline

The information derived from on site sampling should be detailed in full in addition to RIFE data. It is unclear as to the distribution of sampling which has been undertaken and thus a commentary on the degree to which it may be comprehensive is difficult at this time.

2.15.2 Comments on Terms of Reference and Guidance

The inclusion of RIFE is welcome. Reference is made to the Generic Design Assessment (GDA) is also appropriate as potential doses to human and non-human species from the operation of EPR technology is included in this process.

2.15.3 Comments on Consultation to Date

Discussions are anticipated with the Nuclear Installations Inspectorate / Health and Safety Executive and should be detailed in full (particularly in commentary on the suitability of proposed surveys).

2.15.4 Comments on Proposed Studies

The completed studies section 3.13.8 makes reference to assessment of radiological impact of transport of radioactive materials; human radiological impacts and non-human radiological impacts. These studies are welcome but the results should be made available in full in this dedicated section on radiological effects.

Site specific studies are included associated with the human population assessment and non-human radiological effects as a result of liquid and atmospheric discharges. These include sensitive habitats in combination with terrestrial species (representative doses). These studies are supported.

2.15.5 Comments on Graphical Material

No graphical material was included with this section. It is recommended that this be cross-referenced with drawings illustrating sensitive habitats considered within the non-human dose modelling.

2.15.6 Further Comments on Adequacy of Data

Whilst the data provides a degree of confidence that surveys completed and ongoing will provide sufficient information on radiological effects it is recommended that the output from these studies be included in full and confirmed at dose (critical group) limits below 20 µSv/y i.e. negligible. The inclusion of a dose rate of 10 µGy/hr for non-human species is welcome.

2.16 Landscape and Visual Amenity (Section 3.14)

2.16.1 Adequacy of Baseline

Whilst the baseline is considered to be generally adequate, the addition of more drawings would be useful to help set out baseline conditions and context (from a range of distances from the proposed plant and at various points around the compass).

2.16.1.1 Recommended Additions to Baseline

It would be useful to see the TZVI that was used to help identify suitable and appropriate viewpoints in the initial assessment. Further drawings would aid baseline description and help define the extent of the study area.

Within paragraph 3.14.4 it is recommended that reference be made to Figures 10.3 and 10.4 which indicate both international and national designations, although it is also noted that these do not specifically label distinct named areas i.e. AONBs, National Park and this should be completed.

2.16.2 Comments on Terms of Reference and Guidance

Paragraph 3.14.10 confirms that the sensitivity to effect will be assessed using standard and accepted methods but these are not stated. It is expected that these would be the Guidelines for Landscape and Visual Assessment but this is not clear at present. Paragraph 3.14.18 should be amended to include the *Landscape Institute and Institute of Environmental Management and Assessment (2002)*.

2.16.3 Comments on Consultation to Date

Consultations have been adequately described within the text.

2.16.4 Comments on Proposed Studies

The Landscape and Visual Assessment is indicated as 'in progress or planned' in the table in paragraph 3.14.17. Further detail is required on the level of initial assessment which has been carried out to enable the estimated residual effects to have been judged.

2.16.5 Comments on Graphical Material

The Quantock Vale is not a Landscape Type as indicated on Figure 3.11 Landscape Character Plan, but it is a Landscape Character Area as identified in the West Somerset Landscape Character Assessment 1999.

It is recommended that more information is included on the landscape character context to the west of the Hinkley site which on Figure 3.11 is hard up against the edge of the map.

More drawings would aid baseline description and help define the extent of the study area. The range of blue-green colours used on Figure 3.11 can make identifying distinct areas on the plan quite difficult. For Figures 10.3 and 10.4 it would be useful to label the specific designations shown. Figure 10.11 Viewpoint C appears to show the same photograph for both summer and winter views and this should be amended.

2.16.6 Further Comments on Adequacy of Data

Whilst the majority of key issues are listed in this section, there appears to be a description of mitigation and residual effects without the full assessment having been detailed. It is considered that there is generally a lack of supporting drawings and plans accompanying this section.

2.17 Archaeology and Cultural Heritage (Section 3.15)

2.17.1 Adequacy of Baseline

For a report of this type, it is expected that the baseline would be sourced from the local Historic Environment Record (HER) and the National Monuments Record (NMR). This report clearly states its data is sourced from both the HER and NMR, although it did not discuss the possibility of any gaps or limitations in this data. The assessment generally describes and lists the existing heritage resource within both the site and in the locality effectively. Previous non-intrusive field surveys are discussed within the assessment; however the final reports were not included in the appendix. As a result, an assessment of the adequacy of these results and interpretations could not be made. These should be included in the Stage 2 Consultation document.

2.17.1.1 Recommended Additions to Baseline

The baseline section is appropriately characterised and no further additions are recommended at this time with the exception of the non-intrusive field survey data above.

2.17.2 Comments on Terms of Reference and Guidance

The guidelines adopted for this type of report is as recommended by the Institute for Archaeologists (IfA) - *'Standards and Guidance for Desk-Based Assessments, 2008'.* These recommended guidelines by the IfA are referenced within this baseline assessment.

2.17.3 Comments on Consultation to Date

The consultees for this type of report are both statutory (English Heritage) and non-statutory (County Archaeologist), both of whom were consulted. The report illustrates the consultations conducted in relation to the proposed works and how these have been considered.

2.17.4 Comments on Proposed Studies

The proposed trial trenching, as the next phase of assessment, will aid in improving the accuracy of information on the existing heritage resource and therefore future baseline work. Based upon the results of the previous geophysical surveys, the methodology of the proposed archaeological works is clearly defined.

The potential of further buried archaeology on the site has been highlighted and the next stage of assessment, trial trenching, proposed. In advance of construction, the mitigation proposed, preservation in record, is in accordance to Planning Policy Guidance Note 16 (PPG16): Archaeology and Planning (1990), and therefore appropriate.

2.17.5 Comments on Graphical Material

A labelled map of baseline data is essential for the clarity and understanding of this type of report. Although colour-coded, the accompanied drawing was not labelled and thus displayed little clarity in the location/distribution of the known/recorded historic features.

2.17.6 Further Comments on Adequacy of Data

The baseline assessment displayed a clear structure which was consistent and concise. The findings of the assessment could have, however, been included within a summary and conclusion, which would have resulted in the findings being more explicit. In understanding the existing historic environment it is imperative that all relevant data is included with the report. The failure to support the assessment with previous archaeological reports results in the inability to assess previous technical interpretation and understanding of the site.

The incomplete drawings made a visual interpretation of the existing historic environment difficult when comparing the assessment. The inclusion of data labels highlighting the baseline data would have helped understanding the distribution and locality of these sites, therefore resulting in a clearer visual interpretation of the site and its environs.

2.18 Amenity and Recreation (Section 3.16)

2.18.1 Adequacy of Baseline

Consultation with the Somerset County Council's Rights of Way Team is welcomed, as is the Recreational Access Survey undertaken for the Public Rights of Way (PRoW) across and in vicinity of the site. Outline details of other recreational uses within the immediate vicinity are also provided e.g. fishing and horse riding and attempts have been made to characterise the amenity and recreational resources in proximity to the site.

There is generally a narrow focus on the recreational offer in the surrounding area, consideration should also have been given to how the impact of works on site will use facilities located elsewhere in the District in the absence of on site provision.

2.18.1.1 Recommended Additions to Baseline

Given that EDF are proposing to accommodate up to 700 workers on site it would be useful to understand what recreational and amenity services will be provided on site. This provision would need to be able to cater for a diverse range of recreational uses and should not be limited to the small range of uses which have been analysed in the baseline. This is currently absent.

A good understanding of the wider recreational offer within the rest of the District would also be beneficial in order for EDF to provide a suitable offer for their on site staff.

Information showing travel times and locations of offsite facilities which would be used by on site workers due to the absence of a like provision on site is currently absent from the Stage 1 Consultation document and this is required

Further information on the type and scale of the recreational offer to be provided on site is required as it is not possible at this stage to determine whether supply is proportionate to the needs of the workers and whether any provision has been made to address ongoing recreational and amenity needs of existing users of the area around the proposed station. Further context and reference to similar facilities would assist in developing confidence that the proposed provision has a rationale.

2.18.2 Comments on Terms of Reference and Guidance

The rationale for providing on site amenity and recreational facilities is understood, as the health and well being of the on site work force is as important when compared to those workers living off site.

Reference is also made to similar type provision at the Sizewell B plant, although there is a distinct lack of detailed information as to the exact recreational offer both at Hinkley and Sizewell.

2.18.3 Comments on Consultation to Date

The Stage 1 Consultation document confirms that consultation has been undertaken with a broad range of educational organisations and also with Natural England, Community Sport in Somerset and Bridgwater Swimming Club. No details regarding the topics which were discussed have been referenced within the document and thus the relationship of EDF's proposals to the objectives and aspirations of these stakeholders is currently absent.

2.18.4 Comments on Proposed Studies

Further studies and consultation is proposed to engage Somerset County Council Public Right of Way Officer, amenity groups, Natural England, Ramblers Association, Open Space Society and local residents. This commitment to ongoing engagement is welcome.

A leisure audit of the entire Sedgemoor District and the coastal strip of West Somerset is also being undertaken but is not referenced within the Stage 1 Consultation document. This document should be referenced in full within the EDF proposals to address amenity and recreation proposals in the context of local and more strategic aspirations across the area affected.

Greater understanding is needed to understand the level of services currently provided in the towns, any existing deficit, amenity and recreational provision required to serve construction workers, and the permanent 700 workers for a period of 60-80 years. This could be done by providing examples of the intended on site offer and case study example using the best practice example such as Sizewell B. Considerably more information is required to characterise the patterns of movement associated for workers off-site engaged in amenity and recreation.

Any impact on existing leisure facilities will need to be replaced and improved to take account of the additional demand.

2.18.5 Comments on Graphical Material

Graphical data provided detailing the PRoW network is welcome but considerably more information is required on the closure and diversion of PRoW, particularly in terms of the expected phasing of closures and how access will be maintained.

Additional photographic/representational material of the types of recreational facilities to be provided on site is required. This could include site reference data from Sizewell to provide a design basis. In addition, mapping showing the locations of sites used for other recreational pursuits would also be beneficial (for example popular locations for angling pursuits).

2.18.6 Further Comments on Adequacy of Data

The level of focus on amenity and recreational uses analysed as part of the baseline is too narrow and should ensure that there is provision of a more detailed understanding of the amenity and recreational offer provided on and off site.

Analysis should be completed and documented outlining potential off site recreational facilities which will supplement the on site offer as it is unlikely every recreational can be accommodated on site.

Comparative amenity and recreational provision at the Sizewell B plant should also be provided so comparisons on the scale and opportunity of provision can be drawn.

2.19 Socio Economic (Section 3.17)

2.19.1 Adequacy of Baseline

There is a propensity in the Stage 1 Consultation document to reference peak workforce which may potentially skew an assessment of the scale of effect.

The review considers gaps in the supply and demand of workers for the project using occupational and industry data to profile supply conditions against a broad description of demand. However, the Stage 1 Consultation document relies on the transferability of experience gained from longitudinal studies of socio economic impacts created by UK nuclear power stations specifically Sizewell. Whilst this is generally a reasonable starting position, there is little documented within the Stage 1 Consultation document which provides confidence that this data has been contextualised for the proposed Hinckley C project. Reference is made to the socio economic study undertaken for the proposed Hinkley C Power Station in the late 1980s and this is welcome. Further references to Flamanville 3 are also generally welcome although further context should be provided on the similarities and differences between the Flamanville site and the proposed construction at Hinkley.

The assessment of economic impact during the construction phase is dependent upon underlying assumptions from other studies particularly the expected division of migrant and local labour (within the daily commute distance). These assumptions do require sensitivity testing.

Social cohesion implications of having a large influx of migrant workers is largely discounted under the assumption that all adverse impacts can be mitigated through a “worker behaviour” policy and the provision of high quality physical facilities (paragraph 3.17.16). Friction (booth perceived and actual) is likely to result from bringing together an ageing population with a much younger, predominantly male population. The Somerset LAA targets include indicators concerned with a significant population of worklessness relatively close to the site in West Somerset and Sedgemoor, social cohesion, alcohol and drug abuse, which are currently not addressed directly.

Equalities issues remain largely unaddressed. However, the Somerset Economic Strategy seeks an improvement in the female average wage. Measures aimed at enhancing opportunities for females during the construction and operational stages can help address this issue and make headway on this target.

Adequacy of accommodation is dependent upon assumptions on a smaller number of migrant workers than might be the case. Assuming that there is a finite capacity to accommodate migrant workers in the temporary accommodation stock without stressing the supply needed to sustain the local tourism sector.

Many of the labour recruitment outcomes are mediated by the way companies working on the project hire people onto the job. Locally based companies are more likely to hire local people and it would be beneficial to include a profile of local companies in the baseline.

More clarification could be provided on the occupational profile of the project's job demand especially in relation to potential displacement of jobs from the local economy. With other planning consents being negotiated, the Morrison's developments create 1600 jobs which will be recruited from 2010. Other projects such as Building Schools for the Future (BSF) will require a significant construction workforce and all these elements indicate that the degree of labour availability will be constrained and therefore assumptions on the level of local labour optimistic.

2.19.1.1 Recommended Additions to Baseline

It is strongly recommended that a copy of the evaluation material be provided in relation to Flamanville 3 for general access.

The labour demand likely from major developments in proximity to the project should be identified in terms of phasing and cumulative effects on the Hinkley project. This would include the Oldbury site where similar skills will be in demand. This type of analysis will align with the draft NPS which identifies regional clusters as having a cumulative effect on socio economic impacts.

Local labour content in more recent studies is substantively below the 50% assumption level (paragraph 7.1.6 used in study (source: Nuclear Employment CE Delft (2008). Estimates for a reactor project in the Netherlands concluded that the construction phase may have a Dutch content of between 3% to 12% based on type of job at peak. Data from the Olkiluoto 3 project in Finland has recorded only one third of the workforce on site being of Finnish origin. This study expected that the main contractors currently engaged on bringing forward the next generation of reactors were already in the process of creating an international pool of construction and installation workers capable of moving between reactor projects within Europe (following a pattern established in the conventional power sector). Given a contractor preference for construction teams with nuclear experience, members from this pool are likely to be highly attractive compared to others (e.g. people who have worked on Flamanville and Olkiluoto-3. Assuming high labour mobility on major construction projects, members of this pool are likely to be recruited in preference to others in the locality that has no such experience. The standardised parts produced "off site" are also likely to generate a contractor preference for specialised labour from a proprietary supplier who is unlikely to be locally based (although they may come other parts of the UK). Most local jobs were considered to be induced by services purchased by construction workers (an interpretation recognised in paragraph 3.17.16 of the Environmental Status Report). It is recommended that further sensitivity testing be undertaken in relation to a lower local labour assumption and its effects on the distribution of the workforce arising from a lower percentage.

The "optimal" size of a European construction skills pool in nuclear reactor construction will, in part, be influenced by the number of concurrent projects within the overall build programme. Demand for a particular skill simultaneously across a number of sites implies a larger labour pool to deal with the capacity problem. Consideration should be given to the relative phasing of construction programmes across the whole UK and, indeed, European fleet. This factor will have a knock on consequence for the local labour content that can reasonably be assumed on the Hinkley project. This has particular relevance to the achievement of LAA Target NI151 related to high level skills.

Validation of the 90 minute daily commuting zone (paragraph 3.17.4) in relation to different occupational groups should be provided especially in the light of evidence on commuting movements typical of the construction workforce (Workforce Mobility and Skills in the UK Construction Sector, Construction-Skills, Department of Trade and Industry (DTI) and ECITB, 2005).

Clarification should be provided on the basis of the 20% contingency margin. There is currently uncertainty as to whether this relates to assumptions concerning the assumed

productivity differential of workers in the UK versus France. In addition no evidence to date suggests that accommodation requirements for Hinkley 'B' outages have been factored into the overall impact considerations.

Recruitment assumptions are high dependent upon the hiring policy of companies engaged through the procurement strategy. Companies spatially distant from the study area are less likely to hire local workers. Experience on the Finnish EPR nuclear plant suggest that hiring policies can lead to a high migrant worker content in the workforce during the construction stage (up to 70%).

The baseline analysis could benefit from a more expansive characterisation of different groups in receipt of "out of work" benefits (Sedgemoor DC's Economic Resilience Study (2009) identified the lowering of rates of incapacity benefit as a key issue to improving local economic resilience. The study concluded that such a focus would improve the "responsiveness of the local labour pool to new vacancies" but that this would require "multi-agency working and would potentially be substantially affected by the local delivery arrangements for centrally-developed and funded initiatives (e.g. pathways to work)". Success in maximising local participation from "under privileged groups" (paragraph 3.17.16) will rely upon understanding the specific barriers experienced for people on incapacity benefit versus short term entrants onto Job Seekers Allowance.

The issue of workforce displacement is largely discounted on the basis of Sizewell experience (paragraph 3.17.6, "wider Economic Impacts" indent). Although displacement is discounted, other studies (CE Delft, 2009) suggests that displacement is more probable as the skills content increases. Sectors of the local economy that currently employ people on electrical and mechanical engineering tasks may lose them to the project if the wage differentials are significant and the tasks of sufficient duration to offset the temporary nature of the work. This has specific relevance to the achievement of LAA target NI151.

The inclusion of baseline indicators to describe the social and community conditions of the study area reflecting indicators relevant to the LAA targeting framework would be a welcome addition. Drug uses, health service use in relation to alcohol and community cohesion are all measured under the Somerset LAA and are possible areas where the project may have a material effect.

2.19.2 Comments on Terms of Reference and Guidance

The analysis conforms with an interpretation of EIA regulations in relation to the assessment of impacts on people. A description of scope is provided in paragraph 3.17.1. Further detail is contained in the Draft Socio Economic Chapter (September 2009) which is external to the Stage 1 Consultation document. It is recommended that this (and later additions) be provided with the consultation material to allow a fuller account of the assessment to be made.

2.19.3 Comments on Consultation to Date

A number of Socio Economic Stakeholder Workshops are referenced in the text during the course of developing the baseline analysis. Somerset Nuclear Energy Group of local authorities and key agencies are also referenced although there are limited descriptions of the effect that this consultation has had on the approach to the Stage 1 Consultation document.

2.19.4 Comments on Proposed Studies

Further clarification is needed concerning "work on local/ regional area assessment indicators, wider effects and more detailed mitigation and enhancement measures". Confirmation is required as to the relationship of the project to extant LAA targets for Somerset.

A Latent Accommodation Study may help establish whether there are any additional capacities within the local economy to absorb migrant workers without harming the tourism sector. This is strongly recommended.

2.19.5 Further Comments on Adequacy of Data

The socio economic chapter provides the foundation for this section and core assumptions supporting the accommodation strategy and the transport strategy.

The chapter relies on the transferability of socio economic impacts observed during the last nuclear build in the UK and has chosen to use the maximum assumed local labour content.

Limited data from the EPR in Finland suggests that a lower labour content (30%) during the construction phase may be more likely with “knock on” consequences for travel to work modelling and the accommodation strategy including the capacities of the temporary bed-space market. The lower local labour content is contained in the September 2009 EIA Chapter draft.

It is noted that the emerging Overarching National Policy Statement (NPS) for Energy (EN-1) states that *‘applicants should describe the existing socio-economic conditions in the areas surrounding the proposed development and could also refer to how the development’s socio-economic impacts correlate with local planning policy’.* This analysis is absent from the Stage 1 Consultation document and would need to be rectified in any further work leading up to the submission of the Development Consent Order (DCO) Application.

3 Observations on Off-Site Associated Development

3.1 Introduction

This section of the review provides a technical evaluation of the Pre-Application Consultation Stage 1 Document for the Off-Site Associated Development. As with the Hinkley Point C review, focus has been given to the Environmental Status Report (ESR) and accompanying drawings, which provides significant technical material supporting the Stage 1 Consultation process, in addition to the description of each element of the Associated Development in section 4 of the Stage 1 Consultation document. It is recognised, at the outset, that there are technical limitations to the documentation which are a function of the design development and the available technical studies at this time. Where possible, reference made to free-standing supporting documentation has been included within the technical review below. However, where material has been referenced but not provided by EDF, we have made this explicit in the text.

The siting of transport, freight consolidation and residential accommodation associated with the Hinkley proposals is considered a particularly important area for input by the Councils. In contrast to the siting of Hinkley Point C itself, the proposals for the associated infrastructure that will be required to construct and operate the new power station are considered relatively fluid. It is therefore necessary that the councils and communities they represent are able to influence decisions so that positive legacy outcomes can be achieved. The alternative scenario that must be avoided is a legacy of brownfield sites and developments that are not sited or designed in accordance with the long term spatial strategy of the district; or services and facilities that are not viable to maintain once the construction phase is completed.

This response begins by raising a series of observations on the associated development strategy, before providing more specific comments on the proposals for Cannington, Bridgwater, Williton and Combwich. A common theme that emerges from the review is the absence of detail on the role of the Development Consent Order process, the Town and Country Planning Application Process and the Harbour Empowerment Order as it relates to each element of the works. It would be helpful to set out the purpose of the Consultation document in the context of the approach to planning applications and the Development Consent Order processes that will be required for each element.

3.2 Associated Development Strategy

3.2.1 EDF Energy Planning Application Strategy

It is understood that planning permissions for associated development (on and off site) will be pursued through two consent routes: firstly, Town and Country Planning Act (TCPA) applications; and secondly, via a Development Consent Order (DCO) granted by the Infrastructure Planning Commission (IPC). What is not clear from the Stage 1 Consultation document is how the planning permission will be secured for the residential campus developments proposed. Communities and Local Government (CLG) *Guidance on Associated Development* states that the Planning Act 2008 "…defines associated development as development which is associated with a Nationally Significant Infrastructure Project as defined in Part 3 of the Act. The construction or extension of one or more dwellings is specially excluded from the definition of associated development" (Paragraph 4). The EDF Energy Stage 1 Consultation sets out that TCPA applications will be submitted for on-site preliminary works, a new sea wall and jetty, but does not explain how consents will be achieved for residential development.

The Councils would welcome the opportunity to meet EDF Energy to discuss a planning application strategy for residential development, once further clarification from EDF and the IPC is forthcoming.

3.2.2 Strategy Explanation and Justification

An important general point is that the Associated Development Strategy that has informed the overall distribution of associated development proposed by EDF Energy has not been fully explained or justified. It is acknowledged that the strategy set out in the Pre-Application Consultation Stage 1 report will be based on a series of background studies. Nevertheless, the omission of a more detailed strategy section and explanation of proposals in the pre-application document means there are a number of queries that require a response by EDF Energy.

In responding to the consultation it has been difficult to fully assess the identified proposals given the overall lack of justification for their inclusion. The consultation document lacks clear justification for the scale and nature of individual proposals which should be seen as a starting point for setting out a strategy for accommodating development. Respondents are being asked to comment on areas of search for specific uses without the benefit of an underlying strategy. For example, sites in Cannington are identified as potential Park and Ride sites to accommodate 900 vehicles but the document does not adequately explain how such figures have been derived or why such numbers are needed in that specific location.

The outstanding concerns that the Councils have in relation to the freight, worker transportation and accommodation strategies are summarized below and explained in further detail in the relevant sections on specific locations and search areas. It will be necessary for EDF to provide a fuller explanation and justification of the transport and accommodation strategies during the Stage 2 Consultation phase.

3.2.3 Legacy Uses as a Strategy Driver

The Councils are keen to promote an associated development strategy based on an objective of utilising existing sites where legacy issues and aspirations already exist. It is clear that there are certain options where EDF Energy has identified a potential legacy use through consultation, such as the refurbishment of student accommodation in the central Cannington search area CAN-C. In other cases, however, proposed legacy uses seem to be a by-product of the area of search in terms of the need to find a future use for the site once it is no longer required to support the Hinkley proposals. The Councils preference is for a long term outcomes focussed approach that ensures legacy issues are central to the overall strategy and a key consideration in site selection.

3.2.4 Comments on Accommodation Strategy

The Councils are alert to the fact that the accommodation strategy could influence construction worker and public transport proposals, as well as requirements for supporting social and community infrastructure such as education, health and recreation provision. The development of accommodation for construction workers would be expected to achieve the design standards expected for any permanent development by the Councils, while opportunities for proposals to help meet identified housing needs in the district should also be investigated. A series of comments on the accommodation strategy are set out below.

3.2.4.1 Distribution of Residential Campus Developments

There is a strong concern that the proportion of construction worker bed spaces allocated to Cannington (320) when compared to Bridgwater (500), is not reflective of the emerging Regional Spatial Strategy or Sedgemoor Core Strategy Preferred Option. The level of residential development proposed for Williton is broadly supported, assuming an appropriate legacy use for a construction worker campus is agreed with West Somerset Council.

Cannington - The number of campus bed spaces proposed for Cannington (320 bed spaces) is considered out of balance with that proposed for Bridgwater (500) spaces. Although the merits of the individual Cannington areas of search are discussed and further areas within the village are discounted, the document fails to address why such uses could not be better provided elsewhere.

The emerging spatial strategy for Sedgemoor set out in the Core Strategy Preferred Options report identifies Cannington as one of ten potential 'Key Rural Settlements' and as such will be "the focus for only limited housing growth, within existing settlements through infill and redevelopment opportunities". The likely scale of growth for the Key Rural Settlements equates to about 1 or dwellings per annum. Cannington is a village with a population of approximately 2000 residents and a reasonable level of services and facilities for a village of its size. There is a concern that the introduction of temporary accommodation for 320 construction workers will be out of kilter with the scale and role of the village. In addition, the probable social mix of the construction workers is likely to be significantly different to that of the resident population and may raise concerns regarding social impacts. There is no reference in the proposals to how any tensions that may arise in respect of this will be managed (see section 3.2.4.6).

In contrast, Bridgwater has the capacity to absorb construction workers and greater availability of brownfield sites where regeneration is actively promoted. As the settlement that offers the greatest access to services and facilities within the district and as a town already earmarked for significant growth through the Regional Spatial Strategy, it represents the greatest opportunity in Sedgemoor for accommodating associated development in the most sustainable way. The Core Strategy Preferred Option SS1 proposes that Bridgwater should be the focus for the District's housing and employment growth that will contribute to the delivery of the transformational town wide regeneration strategy.

Sedgemoor District Council (DC) propose that the quantity of bed spaces currently proposed for Cannington should be significantly reduced, but suggest that there may be scope for accommodating a limited number of construction workers in Cannington by one or both of the following means:

- Accommodation of construction workers in refurbished college residences, as proposed for search area CAN-C.
- Accommodation of construction workers and their families in dwellings provided on a rural exception site, which would be made available as affordable housing and/or sheltered housing for the elderly.

The Council would welcome the opportunity for a joint discussion with EDF Energy, Cannington College, and Registered Social Landlords (RSLs) about the scope for housing a limited number of construction workers in Cannington.

Williton – Proposals to accommodate up to 200 construction workers in West Somerset are broadly supported, however the Council would welcome further dialogue with EDF Energy around legacy uses for accommodation and the potential for distributing construction worker housing to a series of sites in Williton, Watchet and Minehead. The principle of providing some accommodation in Williton is supported by the Council, but as for Cannington, there are concerns around the social impacts of introducing temporary accommodation for 200 construction workers in the village and the implications for community infrastructure.

3.2.4.2 Quantity of Construction Worker Accommodation Proposed

A further observation by the Councils that could significantly influence the accommodation strategy relates to the EDF Energy estimate that just under half of the total peak construction workforce will be 'local' (defined as living within a 90 minute commute). Local labour content in more recent studies[3] is substantively below the EDF Energy c.50% assumption level (paragraph 7.1.6). Estimates for a reactor project in the Netherlands concluded that the construction phase may have a Dutch content of between 3% to 12% based on type of job at it's peak. Data from the Olkiluoto-3 project in Finland has recorded only one third of the workforce on site being of Finnish origin.

[3] Nuclear Employment CE Delft (2008).

A lower local labour content would mean a high migrant content and a possible need for testing a higher accommodation bed-space requirement. This is likely to feed into a need for more bed-spaces in purpose built accommodation unless additional capacity could be identified. Consideration should be given to possible impacts on fulfilment of statutory obligations by the local housing authorities (if any). The provision of further purpose built accommodation would also have additional transport implications that would need to be modelled.

The Councils fully support EDF Energy's procurement objective to "…encourage and facilitate the involvement of local businesses in the supply chain for the nuclear power station", but are concerned that the local workforce estimate may not be realistic. Reduced levels of local workforce involvement in the project would have clear implications for the accommodation strategy. Should it be found that there is a higher proportion of migrant workers than currently expected, despite efforts to maximise opportunities for locally based construction workers, the Councils' preference is for the majority of additional worker accommodation to be provided in Bridgwater. West Somerset Council would also be willing to investigate further construction worker accommodation options in Watchet and Minehead.

3.2.4.3 Evidence for Proposed Split of Accommodation Types

The baseline section of the strategy is largely based on assumptions concerning the share of peak employment accounted for by migrant labour (see paragraph 4.2.12) which assumes an allowance for 2,400 people requiring bed spaces. Information in Appendix A1 Environmental Status Report suggests that only 600 migrants could be accommodated within the temporary accommodation stock (excluding private rented accommodation) without placing a strain on the local tourism accommodation market.

The Stage 1 Consultation document refers to an estimate that 35% of construction workers will be accommodated in purpose-built campuses; 27% will be accommodated in B&B/Guest Houses/Caravan Parks; 13% will live in owner occupied houses; and 25% will be accommodated in private rented accommodation. It is understood that EDF Energy have undertaken some survey work to understand the availability of these accommodation types, but this is not referred to in the consultation document. Sedgemoor DC and West Somerset Council consider that information demonstrating the feasibility of housing the numbers of workers proposed in these accommodation types should be set out in further detail in the Stage 2 consultation. Particular areas that must be covered are as follows:

- **Tourism accommodation types -** Details should be provided on the locations and B&B / Guest House / Caravan Parks to be utilised for construction workers. These tourism accommodation types are highly dependent on repeat customers and prone to seasonal income flows. The Councils consider that it will be necessary to ensure that sufficient headroom capacity is retained in the tourism accommodation market during the construction phase, so that trips to the area are not discouraged. It will be necessary for the EIA Socio Economic chapter to assess the implications of the project on the tourism industry both during and after the construction phase. This may inform an investment strategy to ensure that the local tourism industry is not adversely affected in the long term. The impact of worker accommodation in areas which are sometimes remote from facilities is also considered a key issue, as is the impact of traffic movements that such accommodation would involve.
- **Private rented -** It will be important to understand the capacity of the private rented sector to accommodate the number of construction workers proposed. This is calculated to be in the region of 600 workers based on the figures in the Stage 1 Consultation document (see Table 1). No consideration is given in the consultation document to the displacement consequences (if any) on non tourist demand for temporary accommodation e.g. households considered homeless. Furthermore, no consideration has been given to speculative purchase of properties for conversion into rental opportunities to expand the supply of short term lets in the area

(reduction in owner occupied property and transfer to private rented accommodation or lodgings). There is a real concern that relatively 'high earners' will displace existing residents by driving up the cost of privately rented accommodation, potentially creating additional housing need or homelessness. It should be noted that West Somerset Council operate a Landlord Scheme that seeks to bring derelict properties back into use. Support for this programme by EDF Energy could assist in providing quality accommodation for construction workers, while also providing clear legacy benefits.

- **Owner occupation -** Whilst the socio-economic data available from EDF externally to this Stage 1 Consultation document discusses the affordability issues in the study area (the ratio of house prices to average incomes is already 8) there is no accounting for the impact of the project on affordability. A worsening in the level of affordability would mean an increase in the demand for affordable housing relative to supply (an LAA Target).
- **Campus developments** - It is noted that the sum of residential campus developments set out in the Stage 1 Consultation Document is significantly greater than the figure of 35% of non-local workers at peak construction set out in EDF Energy Table 4.1 (see Table 1 below). Clarification is required about how the campus development requirements have been calculated.
- **Outages for Hinkley 'B'** – It is noted that no account of the increasing outages for Hinkley 'B' are taken account of within the accommodation strategy which is considered a significant flaw.
- **Management arrangements** - No detail is included on how the accommodation strategy is to be managed for example, through a managing agent on the campuses, or through a booking service for tourism facilities.

The existing accommodation strategy is in fact a temporary accommodation strategy and does not extend to any wider impacts. Reference is made to the development of "worker behaviour policies" in the Environmental Status Report but without a clear linkage to the possible adverse effects created by a large migrant workforce.

Table 1 - Estimated Composition of Accommodation for Non-Local Workers at Peak Construction

Accommodation Type	Indicative %	Campus locations	Estimated bed spaces
Construction campuses	35	Hinkley	700
		Williton	200
		Cannington	320
		Bridgwater	500
		Sub-total	**840 (or 1720 if total of campus options are summed)**
B&Bs/Guest Houses/Caravan Parks	27		648
Owner Occupied	13		312
Private Rented	25		600
Total	**100**		**2400**

The Councils consider that further information should be provided by EDF Energy to demonstrate that the accommodation split set out in the Stage 1 Consultation document can be achieved and that wider impacts on housing and tourism can be managed during the construction phase and in the long term. Both Councils are able to suggest further options for accommodation and are willing to enter into a dialogue with EDF Energy on the matter.

3.2.4.4 Legacy Use and Design of Residential Campus Developments

EDF Energy's accommodation strategy includes an objective to "…ensure that that purpose-built accommodation and associated facilities have a long-term, sustainable legacy benefit for the local community." Legacy uses identified in the consultation document are a hotel, student accommodation and sheltered housing uses.

It is the view of the Councils that the consideration of suitable legacy uses will need to be informed by in-depth understanding of the following factors:

- The Stage 1 Consultation document does not set out the anticipated proportions of family and single person accommodation that will be provided in each location, which limits the ability of the Councils to provide detailed feedback at this stage.
- Affordable housing provision is seen as a priority legacy use for permanent residential accommodation by both Councils. EDF Energy are encouraged to engage with the Councils and Registered Social Landlords (RSLs) to identify specific types of housing need in locations where campus development is proposed. The provision of family dwellings, or buildings that are designed to allow later adaption for family use (a minimum of two bedrooms per unit), is encouraged.
- Provision of student accommodation in appropriate quantities and locations is supported by Sedgemoor District Council. Proposals should be supported with evidence of the ongoing need and viability of student housing and in the context of the further wider ambitions to deliver the Somerset University Partnership Project. Further opportunities for joint discussions between the Councils and education establishments will be welcomed.
- Provision of sheltered housing in appropriate quantities and locations is supported by the Councils, where the need for a facility and ongoing viability of accommodation can be demonstrated. EDF Energy are encouraged to engage with the Councils, Registered Social Landlords (RSLs) and existing care providers to identify requirements for sheltered housing.
- As referred to above for affordable housing, the design of accommodation to provide for flexibility of use is an important consideration. Robust construction and careful consideration of building and site layout will provide scope for legacy use strategies to be adapted to respond to emerging housing priorities over the course of the construction phase.
- Scoping of legacy benefit criteria is not apparent in relation to the creation of additional hotel accommodation and no basis has been established for a lasting benefit to arise from hostel development. The development of hotels is considered to be a market led activity. However, the shortage of good quality hotel provision in Bridgwater is recognised and the market to date has not provided this. The town has some low value hotel accommodation and a higher value facility consistent with the Bridgwater Vision would be considered. This process would accelerate an additional hotel facility for the town consistent with the emerging spatial strategy.

3.2.4.5 Social and Community Infrastructure

EDF Energy's accommodation strategy refers to the provision of facilities and amenities in the residential campus developments (e.g. a restaurant, sport facilities, laundries, bars, TVs in rooms), which will address only a limited range of construction workers need's. For

instance, the Stage 1 Consultation document does not make reference to health care, which is assumed to be of particular importance. In the absence of any details of proposals, it is the view of the Councils that a full assessment of the social and community infrastructure requirements of the proposals should be undertaken for the sectors listed below:

- Libraries, community centres and cultural facilities;
- Social services;
- Education (Early Years, Primary, Secondary, Further and Higher Education);
- Emergency Services (Ambulance, Fire and Rescue and Police);
- Health (Primary and Acute Health Care); and
- Sports facilities, recreation and open space.

As for the accommodation strategy, requirements for social and community infrastructure will be influenced by household size.

In addition, it is considered that further information should be presented around consultations undertaken with infrastructure providers, such as Avon and Somerset Constabulary and Somerset NHS Trust. Provision of community and social infrastructure to support the influx of construction workers will be required to prevent overloading of existing community services. The provision of new or enlarged facilities would also present valuable legacy schemes in the context of ongoing development and household growth in the Districts.

3.2.4.6 Social Cohesion

Social Cohesion is a term that refers to the development of strong and positive relationships between people from different backgrounds in the workplace, in schools and within neighbourhoods[4]. In the context of the Hinkley Point proposals the Councils are keen to ensure that the migration of construction workers to the area is viewed in a positive light by the local population and new arrivals.

Issues related to the whole social cohesion agenda arising from the development are largely subsumed within the accommodation strategy (indent 6, paragraph 4.2.13). Possibly there are wider issues related to the achievement of social cohesion objectives for the study area. The following LAA targets have relevance in relation to possible project effects:

- NI 1 - percentage of people who believe people from different backgrounds get on well together in their local area;
- NI 16 - serious acquisitive crime;
- NI 21 - Dealing with local concerns about anti-social behaviour and crime by the local council and police;
- NI 39 - alcohol harm related hospital admission rates;
- NI 40 - drug users in effective treatment;

The socio-economic data available outside the Stage 1 Consultation document currently identifies a range of social and health indicators where the project may have an adverse impact. These effects should be made explicit and objectives set to control/ manage the consequences of alcohol use, drug misuse and so forth. The objectives set for the accommodation strategy should differentiate between different issues impacted upon by the influx of a large migrant population which include both substantive and perceptual effects.

[4] Guidance on Community Cohesion – LGA/Home Office 2002, page 6.

The Councils are prepared to work with EDF Energy to devise an accommodation strategy that presents the best likelihood of positive integration of the construction workforce into local communities.

3.2.5 Comments on Transport Strategy

Movement of freight and workers during the construction phase will constitute one of the major impacts of the development and therefore a robust transport strategy is considered to be of fundamental importance by the authorities. The broad thrust of EDF Energy's transport strategy, which seeks to minimise disruption to the local community and promote sustainable modes of transport, is therefore welcomed. It is also considered that there are areas of synergy between the EDF Energy transport strategy and the long term transport strategy for Bridgwater, providing opportunities for positive legacy transport infrastructure to be put in place. A strategic transport investment package for Bridgwater will be sought as part of the planning obligations.

This section includes particular observations in respect of the off-site transport strategy. Specific off-site development elements e.g. Cannington Bypass are discussed from section 3.3 below.

3.2.5.1 Cumulative Assessment of Impacts

It is understood that transport modelling to inform transport proposals is ongoing and it is the view of the Councils that this should take account of the cumulative impact of other development proposals. For instance, the Stage 1 Consultation document does not set out the strategic planning context for Bridgwater presented in the emerging RSS and Core Strategy Preferred Option, which includes the construction of 7,700 new dwellings by 2026 or the emerging RSS targets for additional housing in West Somerset of some 2,500 dwellings. It is important to ensure that the cumulative impacts of major developments are fully assessed so that the combined impacts on key junctions and routes can be understood and appropriate transport measures proposed. The objective will be to avoid ad hoc highway proposals relating to specific developments that do not align with a long term multi-modal transport strategy for the town. This work is now urgently required to inform the projects development and the Council advice. The Councils will seek to ensure that transport proposals contribute towards the delivery of the Future Transport Strategy currently being developed by Somerset County Council, the Local Transport Plan and the delivery of the Bridgwater Vision.

3.2.5.2 Freight Consolidation Strategy

The principle of providing freight consolidation facilities to reduce vehicle movements in western Somerset is supported, although Sedgemoor DC have concerns about the proposals for freight consolidation facilities on greenfield land adjacent to Cannington. In general terms it is considered that the Stage 1 Consultation document does not explain the need and reasoning behind the scale and the distribution of sites, and in particular the requirement for a road freight consolidation facility at Cannington is not understood. In the absence of a fuller explanation of the current proposals, the Council's comments on the freight consolidation strategy are as follows:

- A principle of dealing with freight storage and consolidation at the point closest to source is recommended. Road freight would therefore be dealt with at an M5 junction location, while water-borne freight and abnormal loads would be managed at Combwich Wharf.
- The refurbishment and use of wharfs close to Dunball, and as an integrated facility with the proposed freight consolidation facility at search area J23-A, is suggested to minimise road based movement through Bridgwater.
- The use of a temporary jetty at the site for aggregate import is supported.

- Further clarity is required on legacy and/or restoration proposals for temporary freight consolidation facilities. This is considered to be of particular importance for sites at Cannington and Combwich, where reuse as employment sites would normally be discouraged.

3.2.5.3 Park & Ride Strategy

The provision of Park & Ride (P&R) services for construction workers is supported, although it will be important to understand the strategy and assumptions that have guided the distribution and scale of P&R facilities. The concerns and queries of the councils are as follows:

- The scale of the proposed facility at Cannington and Williton are questioned, on the basis that temporary development on greenfield sites is to be avoided if possible. Further information on how the capacity requirements have been calculated will be required.
- It will be necessary to investigate the ongoing viability of P&R facilities as a legacy benefit and, where they are not considered to be redundant post-construction, set out alternative legacy or restoration proposals.
- The provision of P&R services in Bridgwater align with the Bridgwater Vision, Core Strategy Preferred Option and proposals for the provision of high frequency public transport along the A38 and A39 corridors, which is likely to involve the designation of bus lanes and alterations to junctions to provide bus priority measures. EDF Energy have not presented bus routes in the Stage 1 consultation and the Councils would welcome the opportunity to discuss options and how infrastructure and services for the communities will be improved.
- The Councils recommend that joint discussions with EDF Energy, Somerset County Council and bus operators are held to understand the opportunities for high frequency public transport services to be integrated with the P&R services as a legacy benefit. The Stage 1 Consultation document does not set out whether the P&R services would be available for use by the public or clarify whether the services would be maintained into the construction phase. Somerset County Council and bus operators will be able to provide valuable input about the configuration of services that will best serve the construction strategy of EDF Energy and long term needs to the community. At present, the viability of P&R and Bridgwater as a component of a long term transport strategy is not fully understood.

3.2.5.4 Walking and Cycling

Measures to maximise walking and cycling from construction worker accommodation to P&R services are encouraged by the Councils. A series of public realm and cycle path proposals that could be supported by EDF Energy to this end are set out in the Future Transport Strategy (prepared by Somerset County Council) and the Bridgwater Vision.

3.2.5.5 Rail

The travel plan should include proposals to secure improved rail services given the definition of local travel as a journey of 90 minutes or less. This should take account of the accommodation distribution assumptions once agreed. The plan should also set out proposed rail station investment and refurbishment that will facilitate onward journeys by bus, cycling and walking.

Projects that should be investigated include:

- Upgrading and reinstatement (between Bishops Lydeard and Taunton) of the West Somerset line to provide increased line speeds and commuter services between Taunton and Minehead (see section 3.9 also).
- Increased frequency of stopping services for Bridgwater.

- Station investment and refurbishment in Bridgwater and the surrounding area linked to the Bridgwater Vision, for example, the Celebration Mile into the town centre.

3.2.5.6 Travel Plan

Paragraph 4.2.5 of the Stage 1 Consultation document refers to the preparation of a Travel Plan, the development of which is supported by the Councils. Further to the proposed measures set out by EDF Energy, the setting of targets is encouraged so that travel behaviour can be monitored and evaluated.

3.3 Cannington Bypass

3.3.1 Observations on Proposals

Of the eastern and western bypass options presented in the Stage 1 consultation, EDF Energy express a preference for the western route. This preliminary view is supported by Sedgemoor DC on landscape, ecology and land use grounds, although as described below, it will not be possible for the Council to confirm a stance on the Cannington Bypass proposals prior to the completion of Environmental Impact Assessment work and further consultation.

The assessment of the Western and Eastern Route Options is based upon a preliminary environmental assessment. Further detailed evaluation (including opportunities and constraints) should be detailed in this section.

A new bypass at Cannington would comprise a major development in its own right, so proposals must be supported with rigorous justification (considered to be largely absent from the Stage 1 Consultation document at this time). No material conclusion can be reached as to the preference for either route option prior to the completion of the Environmental Impact Assessment work in full (including a full options appraisal). The options appraisal should present 'no bypass' scenarios alongside the bypass route options, and should incorporate information on related Park & Ride and public transport proposals.

It is considered that more detailed consultation is required with Cannington Parish Council, Cannington College, Sedgemoor District Council, Somerset County Council, and the Environment Agency to discuss bypass options, and highway usage and maintenance post-construction. Discussions are also required around potential legacy benefits including:

- Flood risk management for Cannington;
- High quality public transport proposals along the A39;
- Joint car parking and travel planning for EDF Energy and Cannington College.

3.3.2 Further Observations on Technical Issues

Geology, Soils and Land Use

Reference is made to the fact that both route options pass through areas of high quality agricultural land, designated as Best Agricultural Land in the Local Plan. PPS7 recommends that development is avoided on land of this quality wherever possible. The mechanism to address this policy tension should be detailed within the section.

The smaller land take of the western bypass option is acknowledged as an advantage of the western bypass route option.

Hydrogeology, Hydrology, Drainage and Flood Risk

It is noted that further studies are proposed in relation to Hydrogeology; Hydrology, Drainage & Flood Defence. The completion of a Flood Risk Assessment (approach to be agreed with the Environment Agency) is considered to be a priority study. Depending on

the location and design, there is potential for the bypass to either exacerbate flood risk, or serve as a flood risk management structure with legacy benefit.

An understanding of what is possible to secure enhancements to existing flood defences on the Parrett and for the village as a whole is also required, if the western option were to be considered the preferred route.

Transportation

It is considered that the potential environmental impacts of traffic in the centre of Cannington should also be assessed as part of a full options appraisal. It is understood that this work will be undertaken on completion of more detailed traffic modelling. This should be provided as soon as it is available.

Further information on the number, timing and type of anticipated traffic movements through Cannington should be presented so that the significance of environmental impacts in the centre of the village can be properly assessed. A full assessment of no bypass options is considered a necessary element of future consultation material. It is understood that further SATURN and PARAMICS modelling studies will assess no bypass scenarios.

It is understood that Cannington Parish Council have been consulted by EDF. The minutes of the October 2009 Parish Council meeting state that the public have concerns about the proposed routes and that a Dunball option would have been a preferred choice. Concern was expressed that the routes were not on display at the public meeting in the College Main Hall. The Minutes of the October 2009 Parish Council meeting identify that parking by students from Cannington College is a problem in the village. In addition to discussions between EDF and the College about residential requirements, car parking and travel planning may provide an additional area for collaboration. This should be explored in full in progressing to the Stage 2 Consultation Document.

Terrestrial Flora and Fauna

The assessment of impacts on hedgerows is considered to be insufficiently detailed at the present time. In addition to recording the number of hedgerows affected, it will be necessary to estimate the length and ecological value of hedgerows that would need to be removed for each option. An assessment of the historical importance of all hedgerows affected will also need to be carried out to determine whether they are ‘important’ against historical criteria.

Noise and Vibration and Air Quality

The Noise & Vibration and Air Quality sections of the ESR provide a preliminary assessment of the potential impacts at the Main Development Area and the western and eastern bypass route options. Whilst this is welcome, there is limited information (particularly baseline data) allowing a technical preference to be provided in noise and air quality terms.

The rationale for providing a Cannington Bypass is understood with respect to minimising air quality, noise and vibration impacts in the centre of the village. Nonetheless, current government guidance stresses the need to consider alternatives to building new roads. Proposals for the construction of major new highways must therefore meet the most rigorous levels of justification (Sedgemoor Local Plan, paragraph 7.11). Further information should be included within the Stage 2 Consultation by way of justification.

It is understood that further assessments are to be undertaken by EDF Energy. The roads that should be assessed will need to be agreed with Sedgemoor District Council.

Landscape and Visual

Mapping data provided under this section are generally adequate to describe the proposed routes. However, additional photographic material and photomontages from key viewpoints will be important to understand the landscape and visual impact of the bypass route options.

It is considered by Sedgemoor District Council that the eastern route would significantly impact on the landscape character of the area, particularly as a greater amount of land will be affected and the proposed road would need to be elevated to reduce the liability of flooding.

The western route option is shorter in length and impacts on less sensitive landscape areas, and, subject to the completion of further detailed assessment work, would also result in less loss of hedgerows and trees. In terms of landscape impact some of the road alignment would be set within a cutting which would help to screen the bypass, however, it is important to note that the western route would adversely impact the setting of Brymore School (a Grade II Listed Building).

3.4 Cannington

3.4.1 Observations on Cannington South (CAN-A Search Area)

Land to the south of Cannington has been identified as a potentially suitable area to accommodate a campus for 200 construction workers; a Park and Ride facility and a freight consolidation facility for road-borne freight.

The Stage 1 Consultation Stage 1 document identifies a series of planning matters that apply to the CAN-A search area, which have been supplemented here with relevant policy guidance where relevant:

- The search area falls outside the defined settlement boundary. Local Plan Policy STR3 states that outside defined settlement boundaries, development will be strictly controlled.
- Part of the area falls within a Local Plan Green Wedge designation. Local Plan Policy CNE4 encourages positive land management for landscape, amenity and nature conservation in these areas.
- The search area falls within the setting of Cannington Conservation Area. Policy HE4 advises that new development should positively enhance the character or setting of the Conservation Area.
- Part of the search area falls within the functional floodplain of Cannington Brook (Flood Zone 3b). PPS25 states that only water-compatible uses and essential infrastructure should be permitted in these areas.
- Cannington is identified in the Core Strategy Preferred Options as a Key Rural Settlement, with potential for limited housing and small-scale development growth.

The Stage 1 Consultation document does not identify that Cannington Brook is a designated County Wildlife Site, where legally protected species have been recorded.

It is unclear how the proposals for search area CAN-A contribute to the objectives of the Council's emerging Core Strategy (para. 4.5.5, bullet 2 and para 4.5.10) given the concerns that they do not reflect the scale and character of the envisaged role of Cannington, as outlined in section 3.2. Furthermore, paragraph 4.5.5, bullet 4 of the Stage 1 Consultation document suggests a misunderstanding of the role of the Council's Strategic Housing Land Availability Assessment (SHLAA). The SHLAA does not set out the aspirations of the Council for future residential development, but represents evidence of future potential in terms of land supply.

The policy presumption is for strict control of development outside the defined settlement boundary of Cannington, although it is acknowledged that there could be a special case for associated development linked to Hinkley. It is the initial view of Sedgemoor DC that Search Area CAN-A is not suitable for the development proposed:

- Residential Campus – Bridgwater should be the focus for residential development proposals, with the CAN-C Search Area being the preferred location for a limited amount of construction worker housing in Cannington. A modest amount of housing suitable for transfer to an affordable housing legacy use may be acceptable at CAN-A, but only if a pressing need for construction worker housing at Cannington is demonstrated. A potential hotel use would be contrary to policy which seeks to locate such uses in towns.
- Park & Ride facility – the large scale of Park & Ride facilities proposed at Cannington is questioned and will require further justification. Search Area CAN-A may be preferred to CAN-B due to the location closer to Cannington village, which would encourage walking rather than driving from the village to access bus services.
- Freight Consolidation Facility – proposals for freight consolidation facilities at Cannington are not supported by Sedgemoor DC at this time. Should it be demonstrated that a facility at Cannington is absolutely necessary for an effective freight consolidation strategy, it is the Council's initial view that search area CAN-B would be preferred over CAN-A as there would be reduced disturbance to residential properties.

In the circumstances that EDF Energy decided to progress proposals for CAN-A, development schemes would need to be further developed to address the following matters:

- EDF Energy to demonstrate why permanent buildings could not be located within the existing settlement boundary;
- Full restoration or legacy proposals would need to be presented where temporary Park and Ride and freight consolidation sites are to be located on agricultural land. Any potential commercial legacy use would need to be of a scale that is appropriate to the role and function of the village, but there may be some opportunities for creating local employment opportunities which will benefit the self-containment of the Cannington without giving rise to significant in-commuting.
- Proposals for the layout and design of development in the Search Area are required to demonstrate how the setting of Cannington Conservation Area would be protected or enhanced; and how the amenity and biodiversity value of Cannington Brook and the green wedge would be safeguarded;
- Further consultation with Cannington Parish Council and Sedgemoor District Council is required to understand opportunities for legacy use of campus recreation facilities, for instance, as a community centre. There may also be potential for legacy use of worker accommodation as affordable housing.

3.4.2 Further Observations on Technical Issues

Transportation

The comparative advantages of providing a residential campus, Park & Ride facility and freight consolidation facility in the CAN-A search area are understood, in particular:

- Siting the Park and Ride and consolidation facility to the south of Cannington will help to reduce the number of vehicle movements through or around the village;
- The area has a good relationship to the existing local road network and western Cannington Bypass route option;
- Furthermore, large parts of the search area are located outside the floodplain.

There is a degree of uncertainty as to why the proposed consolidation facility is proposed at Cannington, when there is one at Bridgwater which could handle road freight. The needs

assessment should be completed in full (with further evidence / justification for alternatives proposed).

Socio-economic Issues

Further information is required on the demographic make up of households to be located in Cannington, so that health, education and other community infrastructure requirements can be assessed. The Council's existing Local Plan Policy H31 confirms that where there is quantifiable unmet affordable housing need within a village, the Council may be willing to release land that would not otherwise be released for housing to address this need.

A potential advantage of the CAN-A search area is that there is scope to locate residential and recreational buildings and facilities contiguous to the existing settlement boundary, if there are no suitable sites available within the village.

The completion of a socio-economic study that identifies requirements for social and community infrastructure in Cannington associated with construction worker households is considered an important area for further investigation. It is expected that the proposed studies on Amenity and Recreation will contribute towards a better understanding of impacts on certain types of existing facilities.

The Parish Plan produced in 2005 sets out general issues for the village including a lack of affordable housing. The most recent Housing Needs Survey for Cannington in January 2007 identified a need for 30 affordable housing units, while the waiting list for Council Housing in October 2008 showed 86 households had listed Cannington as their first choice. (This figure includes those currently living elsewhere). In addition, there is a need highlighted for a Community Centre and a perceived inadequacy of policing.

Terrestrial Flora and Fauna

Cannington Brook is designated as a County Wildlife Site. Local Plan Policy CNE9 advises that where planning permission is sought for development which would damage the nature conservation value of a site, such damage should be kept to a minimum and mitigation or compensation measures provided. Developers are encouraged to make positive provision for wildlife through appropriate habitat creation/restoration and subsequent management. Further information is thus required on how the Cannington Brook will be protected / enhanced through the project.

Landscape and Visual

Sedgemoor District Council consider that there will be significant impact on the village of Cannington, much of which is designated as a conservation area. The proposals will inevitably impact on the setting of the Conservation Area and will be detrimental to the rural character of the village. Access into the site may also impact on the established landscape buffer referred to above as highway requirements will necessitate the formation of visibility splays resulting in the removal of established planting.

Land Contamination and Waste

Further contaminated land assessments/surveys are to be undertaken by EDF Energy on relevant sites. These will need to be reviewed and approved by Sedgemoor DC when they are completed. If these surveys identify contamination risks then further work may be required.

Air Quality

Further Air Quality assessments are to be undertaken by EDF Energy. The methodologies will need to be consistent with current UK guidance and the methods and results will need to be approved by Sedgemoor District Council.

3.4.3 Observations on Cannington North-West (CAN-B Search Area)

Land to the north-west of Cannington (including Cannington Quarry) has been identified as potentially suitable for a Park and Ride facility; freight consolidation (road or water-borne) and a spoil disposal site. The Stage 1 Consultation Stage 1 document identifies a series of planning matters that apply to the CAN-B search area, which have been supplemented here with policy guidance where relevant:

- The search area falls outside the defined settlement boundary. Policy STR3 states that outside defined settlement boundaries, development will be strictly controlled;
- The search area is located in an area of high quality agricultural land, designated as Best Agricultural Land in the Local Plan. PPS7 recommends that development is avoided on land of this quality wherever possible;
- The search area is located within the setting of two Scheduled Monuments, an Iron Age/Roman British Settlement and an Iron Age hillfort, Cynwit Castle, which is also known as Cannington Camp. Policy HE11 advises that planning permission will not be granted for development that would damage or destroy these sites or their settings unless the importance of the proposed development outweighs the national significance of the remains;
- The Somerset Minerals Local Plan (2004) indicates that the area lies within the Mineral Consultation Area for Cannington Park/Castle Hill Quarries;
- Cannington is identified in the Core Strategy Preferred Options as a Key Rural Settlement, with potential for limited housing and small-scale development growth.

In addition, Cannington Quarry is a designated County Geological Site where appropriate habitat protection and enhancement measures would be sought (Local Plan policy CNE9).

The policy presumption is for strict control of development outside the defined settlement boundary of Cannington, although it is acknowledged that there could be a special case for associated development linked to Hinkley. It is the initial view of Sedgemoor DC that Search Area CAN-B is not suitable for the development proposed:

- Park & Ride facility – the large scale of Park & Ride facilities proposed at Cannington is questioned and will require further justification. Search Area CAN-A may be preferred to CAN-B due to the location closer to Cannington village, which would encourage walking rather than driving from the village to access bus services.
- Freight Consolidation Facility – proposals for freight consolidation facilities at Cannington are not supported by Sedgemoor District Council at this time. Should it be demonstrated that a facility at Cannington is absolutely necessary for an effective freight consolidation strategy, it is the Council's initial view that search area CAN-B would be preferred over CAN-A as there would be reduced disturbance to residential properties (although it is noted that there are a number of properties adjacent to the site).
- Cannington Quarry is a designated County Geological Site and a site where significant archaeological remains have been recovered in the past. For these reasons the proposals for the quarry are not supported and EDF Energy are urged to consider and present further options for spoil disposal. The use of spoil in flood risk management works is a beneficial reuse option that should be investigated.

In the circumstances that EDF Energy decided to progress proposals for CAN-B, development schemes would need to be further developed to address the following matters:

- EDF Energy to demonstrate why permanent buildings could not be located within the existing settlement boundary;

- Full restoration or legacy proposals would need to be presented where temporary Park and Ride and freight consolidation sites are to be located on agricultural land. A restoration option that could be considered is the creation of community woodland.
- Proposals for the layout and design of development in the Search Area are required to demonstrate how the setting of the Scheduled Monuments would be protected or enhanced.

3.4.4 Further Observations on Technical Issues

Transportation

The comparative advantages of providing a Park & Ride facility, freight consolidation facility and spoil disposal site (Cannington Quarry) at the CAN-B search area are understood, in particular:

- The proposed land uses would be located away from residential properties in an area, thereby reducing disturbance to residents;
- The area has good potential to provide a combined road and water-borne freight consolidation facility, given the proximity to Combwich Wharf and Hinkley Point C site.
- The quarry is located within relatively close proximity to Hinkley, so would limit the need for long distance spoil transportation, depending on the locations of alternative sites;
- It is noted that the site at CAN-B is also well located in relation to northern junctions of the Cannington Bypass route options, although in comparison to CAN-A, road freight would need to travel through or past the village prior to consolidation.

Geology, Soils and Land Use

Cannington Quarry is designated as a County Geological Site. Local Plan Policy CNE9 advises that where planning permission is sought for development which would damage the nature conservation value of a site, such damage should be kept to a minimum and mitigation or compensation measures provided. Developers are encouraged to make positive provision for wildlife through appropriate habitat creation/restoration and subsequent management.

As a designated County Geological Site the use of Cannington Quarry as a spoil tip would not be permitted unless a full assessment of alternatives is presented along with a plan to provide compensation for the loss of the quarry site.

Landscape and Visual

It is noted that there are a number of residential properties adjacent to the site and these will need to be buffered and well-screened by landscape planting from the proposed development. The roadside hedgerow adjacent to Rodway would need to be reinforced and new hedgerow and associated tree planting would need to be provided to form a natural boundary to the site where no/poor hedgerow currently exists.

Land Contamination and Waste

Further contaminated land assessments/surveys are to be undertaken by EDF Energy on relevant sites. These will need to be reviewed and approved by Sedgemoor District Council when they are completed. If these surveys identify contamination risks then further work may be required.

Air Quality

Further Air Quality assessments are to be undertaken by EDF Energy. The methodologies will need to be consistent with current UK guidance and the methods and results will need to be approved by Sedgemoor DC.

3.4.5 Observations on Cannington Central (CAN-C and CAN-D Search Areas)

Cannington Village has been identified as a potentially suitable location for the siting of a campus for 120 construction workers through refurbishment of existing college accommodation or new build accommodation.

The Stage 1 Consultation Stage 1 document identifies a series of planning matters that apply to the CAN-C and CAN-D search areas, which have been supplemented here with policy guidance where relevant:

- CAN-C is located within the defined settlement boundary of Cannington. Policy STR4 applies a sequential test for the identification of sites, expressing a preference for development on brownfield or redevelopment sites within existing settlements. Similarly, Core Strategy Preferred Option SS1 proposes limited growth in Key Rural Settlements, such as Cannington, through infill and redevelopment opportunities. CAN-C, which proposes the refurbishment of existing accommodation, conforms with this principle;
- CAN-D would involve the development of land outside the defined settlement boundary, which is currently in use as a golf course education/training facility. Policy STR3 states that outside defined settlement boundaries, development will be strictly controlled;
- Search area CAN-C is located within Cannington Conservation Area. Policy HE4 advises that new development should positively enhance the character or setting of the Conservation Area.

Proposals to refurbish existing accommodation in Search Area CAN-C are supported by Sedgemoor DC, subject to the detailed designs being finalised and approved taking account of the conservation area setting. The potential transfer of any resulting campus development to the control of the college would be welcomed, although greater detail will be required in terms of understanding the actual accommodation needs of the college in terms of scale and timing, particularly any displacement issues of current students.

Search Area CAN-C is the Council's preferred option for a campus development of limited scale in Cannington. This is because CAN-D falls outside the defined settlement boundary, is located in an area of open space and is currently use as a golf recreation, training and education facility. There are is also mature planting on the site and insufficient detail has been provided at this stage to comment on the impact of tree felling and hedgerow removal at this stage.

3.4.6 Further Observations on Technical Issues

Archaeology and Cultural Heritage

Search Areas CAN-C and CAN-D are both located in a designated Area of High Archaeological Potential. Policy HE9 advises that an assessment of the nature, character and importance of the site will be sought prior to the determination of any planning application.

Amenity and Recreation

Search area CAN-D is used as a golf course education and training facility by Cannington College. Proposals for re-provision/compensation would be required to accompany proposals for residential development on the site. Policy RLT1 advises that development

which would result in the loss of recreational open space will not be permitted unless a replacement facility of equivalent sports and/or recreation benefit is made available.

The case for search area CAN-D is considered less strong at this stage, taking account of the location outside the defined settlement boundary and existing alternative outdoor leisure use.

It is not clear where amenity and recreation facilities would be provided if EDF were to pursue residential development at search areas CAN-C or CAN-D rather than CAN-A.

Socio-economic Issues

The Stage 1 Consultation Document provides a summary of the key issues pertinent to development proposals for the search area, but does not distinguish between the fact that search area CAN-C is located within the existing settlement boundary (as defined in the Local Plan), while search area CAN-D is not.

With respect to search area CAN-C, the siting of residential accommodation within the defined settlement boundary of Cannington and proposals for legacy use by the College would appear appropriate, subject to the detail of schemes coming forward. The legacy benefit of providing new/refurbished residential units for use by the College is acknowledged, although it is considered that affordable housing requirements should also be taken into consideration.

The preliminary environmental assessment work undertaken for search areas CAN-A (Cannington South) and CAN-B (Cannington North West) has not been extended to the central Cannington sites. The completion of a socio-economic study that identifies requirements for social and community infrastructure in Cannington associated with construction worker households is considered an important area for further investigation. It is expected that the proposed studies on Amenity and Recreation will contribute towards a better understanding of impacts on existing facilities.

Land Contamination and Waste

Further contaminated land assessments/surveys are to be undertaken by EDF Energy on relevant sites. These will need to be reviewed and approved by Sedgemoor District Council when they are completed. If these surveys identify contamination risks then further work may be required.

Air Quality

Further Air Quality assessments are to be undertaken by EDF Energy. The methodologies will need to be consistent with current UK guidance and the methods and results will need to be approved by Sedgemoor District Council.

3.5 M5 Junction 23

Search areas J23-A and J23-B have been identified as potentially suitable locations to accommodate a Park & Ride facility to accommodate up to 750 cars and a freight consolidation facility for road-borne freight.

The Stage 1 Consultation Stage 1 document identifies a series of planning matters that apply to the J-23A and J-23B search areas, which have been supplemented here with policy guidance where relevant:

- The northern extent of Search area J23A contains a Site of County Importance for Archaeology and is located opposite a site containing Motte and Baileys (a Scheduled Monument). Policy HE12 advises that planning permission will not be granted for development which would damage or destroy local important archaeological remains, unless the importance of the development outweighs the local significance of the remains;

- There may scope for ongoing legacy use of the proposed Park & Ride site to serve Bridgwater. The Bridgwater, Taunton and Wellington Future Transport Strategy identifies potential for a Park and Ride site to the north of Bridgwater on the A38 transport corridor. Reference is also made to the Bridgwater Vision, which allocates the A38 as a 'key public transport corridor' and 'visually improved arterial' route;
- Search areas J23A and J23B are located in Flood Zone 3a. PPS25 states that, in this zone, developers and local authorities should seek opportunities to reduce the overall level of flooding in the area through the layout and form of the development and the appropriate application of sustainable drainage techniques.

Search areas J23A and J23B fall outside the defined settlement boundary for Bridgwater set out in the Local Plan, however the scope for development of land along the A38 to the north of Bridgwater is recognised in the Core Strategy Preferred Options and Bridgwater Vision:

- The Core Strategy Bridgwater Spatial Diagram shows a northern Park & Ride site and an employment designation of 10ha on the A38. Preferred Option BW1 confirms the status of the 'Bridgwater Vision' as a material planning document;
- The Bridgwater Vision promotes the A38 corridor north of the town as a "Green Gateway Business Park." The A38 would be transformed through the creation of a tree-lined boulevard, with high frequency bus connections to the town centre and segregated pedestrian and cycle lanes. The Dunball Roundabout is identified as a potential location for new landmark structures;
- The Sedgemoor Infrastructure and Delivery Study has identified that the cost of increasing capacity in the electricity distribution network to the north of the town can act as a deterrent to investment in the area;
- Search area J23B abuts one of the Parrett Barrier site options, so it may be necessary to maintain access to this location in any site layout;

The rationale for providing a Park and Ride site and consolidation facility at J23 is supported on the basis that vehicle movements throughout the rest of the highways network in the town centre and to the western parts of Sedgemoor would be minimised. As identified by EDF Energy, there would also be opportunities for the proposals to contribute towards the achievement of plans set out in the Core Strategy Preferred Options, Bridgwater Vision and Future Transport Strategy.

It is the initial view of Sedgemoor DC that search area J-23A is the preferred option for both the Park & Ride and freight consolidation facilities for a number of reasons. Search area J-23A is well located in terms of access to and from the M5 motorway and is well screened by established hedgerow and bunding. In contrast, access to the J-23B search area is relatively convoluted, as traffic can only access the site directly from the north bound lanes (vehicles approaching the site from J23 would need to complete a long loop on A38 prior to entering the site). In addition the site has an irregular shape making the configuration of development more difficult and Environment Agency requirements preclude any planting on the flood defence banks adjacent to the river, reducing the ability for landscape screening to be provided. and there is an extant consent for employment development on the site.

Important matters to be taken into account in developing a scheme for the J-23A search area include:

- The extent to which the proposals support and further the objectives for the A38 public transport corridor and Green Gateway Business Park set out in the Core Strategy Preferred Options, Bridgwater Vision and Future Transport Strategy.
- The ongoing viability of the Park and Ride site beyond the Hinkley Point C construction period and the implications this could have for legacy and restoration proposals.

- How flood risk will be managed at the site, taking account of the Parrett Barrier proposals, associated embankment improvements and access requirements.
- The potential for enhancing the setting of the Motte and Baileys Scheduled Monument located to the northeast of search area J-23A.
- The provision of fully serviced employment sites may represent an appropriate legacy use, depending on the acceptability of employment site allocations in the Core Strategy.
- Suitable premises for the relocation of businesses with an existing interest in the J-23A search area.
- The Dunball roundabout area at J23 is considered a key gateway into Bridgwater and it is important that any facilities in this area are well shielded by other built form development. Large areas occupied by parked vehicles would need to be well screened.

3.5.1 Observations on Technical Issues

Land Contamination and Waste

Further contaminated land assessments/surveys are to be undertaken by EDF Energy on relevant sites. These will need to be reviewed and approved by Sedgemoor DC when they are completed. If these surveys identify contamination risks then further work may be required.

Air Quality

Further Air Quality assessments are to be undertaken by EDF Energy. The methodologies will need to be consistent with current UK guidance and the methods and results will need to be approved by Sedgemoor DC.

3.6 M5 Junction 24

Search areas J24-A, J24-B and J-24C have been identified as potentially suitable locations to accommodate a Park & Ride facility to accommodate up to 350 cars (in addition to the site at J24) and a freight consolidation facility for road-borne freight (as an alternative to the site at J24).

The Stage 1 Consultation Stage 1 document identifies a series of planning matters that apply to the Junction 24 search areas, which have been supplemented here with policy guidance where relevant:

- Search area J24-A contains a Site of County Importance for Archaeology. Policy HE12 advises that planning permission will not be granted for development which would damage or destroy local important archaeological remains, unless the importance of the development outweighs the local significance of the remains;
- There may scope for ongoing legacy use of the proposed Park & Ride site to serve Bridgwater, particularly if search area J24-A was selected. The Bridgwater, Taunton and Wellington Future Transport Strategy identifies potential for a Park and Ride site to the south of Bridgwater on the A38 transport corridor. Reference should also be made to the Bridgwater Vision, which allocates the A38 as a ‘key public transport corridor’ and ‘visually improved arterial’;
- All search areas are located in an area of high quality agricultural land, designated as Best Agricultural Land in the Local Plan. PPS7 recommends that development is avoided on land of this quality wherever possible.

All three search areas identified by EDF fall outside the defined settlement boundary for Bridgwater set out in the Local Plan, however the scope for development in search areas

J24-A and J24-C is established in the Core Strategy Preferred Option and Bridgwater Vision. The Core Strategy Bridgwater Spatial Diagram shows a southern Park & Ride site in the location of search area J24A and an employment designation of 22ha at search area J24-C. Preferred Option BW1 confirms the status of the 'Bridgwater Vision' as a material planning document.

The Bridgwater Vision promotes the A38 corridor south of the town at Huntworth as an "Enhanced Distribution Centre." High frequency bus connections would be provided along the A38 to the town centre, together with segregated pedestrian and cycle lanes. Opportunities should be taken to enhance wildlife habitats and increase public use of the Bridgwater and Taunton Canal that passes to the east of search area J24C. Search area J24C falls within a Local Plan Green Wedge designation. Policy CNE4 encourages positive land management for landscape, amenity and nature conservation in these areas.

The rationale for providing a Park and Ride site and consolidation facility at J24 would appear appropriate on the basis that vehicle movements throughout the rest of the highways network in the centre of Bridgwater and to the western parts of Sedgemoor would be reduced. There would also be opportunities for the proposals to contribute towards the achievement of non-car transport infrastructure and public realm proposals set out in the Core Strategy Preferred Options, Bridgwater Vision and Future Transport Strategy.

It is the initial view of Sedgemoor DC that search area J23-A at north Bridgwater is the preferred location for the Bridgwater freight consolidation facility, but that search area J24-A is an appropriate location for a south Bridgwater Park & Ride site. The reasons for putting forward search area J24-A as the preferred Park & Ride location are set out below:

- J24-A presents the greatest opportunity for a legacy public transport use on the basis that is located on the A38 public transport corridor and directly adjacent to employment uses and the major residential development of Stockmoor.
- The land at J24-A is currently being promoted for employment development via representations on the Core Strategy Preferred Option report. This will have an impact on the sites availability in the short to medium term although could potentially provide longer term legacy benefits in terms of a serviced site.
- A Park & Ride site located to the east of the M5 at J24-B or J24-C would be likely to increase the number of vehicle movements across Junction 24.
- The Bridgwater Vision clearly states that the M5 frontage of Bridgwater is the town's 'shop window'. The J24-B and J24-C search areas are visually prominent from the motorway and the freight consolidation and park and ride proposals are not considered appropriate in this context. Any development in this area could impact significantly on the open landscape to the east of the motorway.
- Of the three search areas presented for consultation, policy support for development at J24-B is weakest as it does not fall with the settlement boundary defined in the Local Plan or Core Strategy Preferred Option. There are no future development aspirations that would support its short-term use on the basis of any long-term legacy benefit. Instead the only legacy use that could be considered here would be its future restoration which is not referred to in Table 4.9 of the Stage 1 Consultation document. In addition, the size of this area of search would restrict its use to a Park and Ride site separate from the freight consolidation facility. In principle it would be preferred if both facilities were combined within a single search area, thus minimising its overall impact.
- Search area J24-C is identified in the Core Strategy Preferred Option report for employment development (22ha), meaning there could be potential for a serviced site as a legacy. It is important to note, however, that the site is facing significant opposition through the consultation process and there are a number of outstanding

issues that still need to be addressed, including the ability to address significant highway constraints. There are also concerns around the impact development would have on the landscape setting of the hamlet of Huntworth.

The Stage 1 Consultation document refers to an alternative Park and Ride site further to the north on the A38 (adjacent to Dawes Farm), which is allocated in the adopted Local Plan. It is noted that this site has been discounted by EDF Energy on grounds of potential adverse impacts on residential amenity on the basis of off-peak operation, but would request that a full and comprehensive assessment is undertaken before discounting the site completely. Particularly given that the legacy benefits on this site could ensure an outcome consistent with the objectives of the Local Plan and Bridgwater Vision.

Important factors in determining the acceptability of a scheme at search area J-24A or the allocated site in the Location Plan are:

- The extent to which the proposals support and further the objectives for the A38 public transport corridor and Enhanced Distribution Centre proposals set out in the Core Strategy Preferred Options, Bridgwater Vision and Future Transport Strategy;
- The ongoing viability of the Park and Ride site beyond the Hinkley Point C construction period and the implications this could have for legacy and restoration proposals;
- Full restoration or legacy proposals should be presented where temporary Park and Ride and freight consolidation sites are to be located on agricultural land;
- The provision of fully serviced employment sites may represent an appropriate legacy use, depending on the acceptability of employment site allocations in the Core Strategy.

3.6.1 Observations on Technical Issues

Land Contamination and Waste

Further contaminated land assessments/surveys are to be undertaken by EDF Energy on relevant sites. These will need to be reviewed and approved by Sedgemoor District Council when they are completed. If these surveys identify contamination risks then further work may be required.

Air Quality

Further Air Quality assessments are to be undertaken by EDF Energy. The methodologies will need to be consistent with current UK guidance and the methods and results will need to be approved by Sedgemoor DC.

3.7 Bridgwater

Bridgwater search areas BRI-A, BRI-B, BRI-C and BRI-D are identified as potentially suitable locations for accommodation for up to 500 construction workers in one or more campuses.

The Stage 1 Consultation Stage 1 document identifies a series of planning matters that apply to the Bridgwater residential search areas, which have been supplemented here with policy guidance where relevant:

- Mixed-use development proposals for search area BRI-A ‘North Bridgwater’ have been granted planning consent, subject to the completion of a S106 Agreement.
- The Bridgwater Vision identifies search area BRI-B ‘The Cattle Market’ as a potential site for residential development that would help to create the enhanced mixed use area envisaged by the Bridgwater Challenge;

- Search area BRI-C currently comprises sports pitches used by Bridgwater Rugby Club, Bridgwater College and Bridgwater Town Football Club. Policy RLT1 states that 'development that would result in the loss of recreational open space will not be permitted unless a replacement facility of equivalent sports and/or recreation benefit is made available.
- Part of the BRI-D search area benefits from planning permission for a 100-bed hotel, as part of a larger tourist complex;
- Potential legacy uses for the campus development include hotel, sheltered accommodation, student residential, dwellings, employment space including starter units and community facilities;

Proposals to provide residential development in Bridgwater benefit from strong policy support. Core Strategy Preferred Option SS1 states that Bridgwater will be the focus for the District's housing and employment growth that will contribute to the delivery of the transformational town wide regeneration strategy. Preferred Option BW1 confirms the status of the 'Bridgwater Vision' as a material planning document.

Proposals set out in the Bridgwater Vision which should be considered in the site selection and scheme development process are as follows:

- BRI-A – Development at North East Bridgwater is to provide an exemplar of sustainable development providing opportunities for people to live, work, learn and enjoy their leisure time. Transport and movement networks within the site and links to surrounding areas of Bridgwater are considered of great importance. Proposals include the visual improvement of the A39 (Bath Road) as a main arterial route into Bridgwater, a new link road across the railway line to the A38 (Bristol Road), and a new pedestrian/cycle link crossing the motorway and railway line;
- Search area BRI-B also bounds the A39 (Bath Road), an important arterial route that requires visual improvement;
- Search area BRI-C is located within the Station Gateway project area, where new development adjacent to the railway corridor will incorporate flexible office space (incubator, workshops and live/work units) alongside high density residential development;
- Search area BRI-D falls outside the Bridgwater Challenge study area, although the Bridgwater and Taunton Canal that passes the site is identified as a principal pedestrian/cycle link.

Of the four search areas set out in the consultation document, it is the initial view of Sedgemoor DC that search areas BRI-A, BRI-B and BRI-C are to be supported as potential locations for construction worker accommodation. An initial preference is expressed for campus development at BRI-B, the Cattle Market regeneration site, for the following reasons:

- For campus development to proceed at BRI-A it will be necessary to demonstrate that plans can be integrated with, and would not compromise, the design of a mixed-use sustainable community at North East Bridgwater. It is important to stress that there would need to be some flexibility to ensure legacy benefits are realised i.e. adaptability of buildings and layout of services. The possibility of later conversion of buildings to B1 offices would assist in the delivery of the employment earmarked for this development and would offer greater advantage than buildings that are restricted only to future flatted residential use.
- Campus development at search area BRI-B would sit well with the Bridgwater Vision proposals for the Wyld Road area and any leisure and recreation facilities would be accessible from North East Bridgwater, the College and town centre.

There are proposals for a footbridge across the railway site to BRI-A to have a footing within this site, making it an important catalyst site for enhanced access to the North East Bridgwater urban extension.

- The inclusion of search area BRI-C is supported, though any building or structure should be adaptable to allow for future legacy benefits potentially in connection with the adjacent college. Search area BRI-C is currently occupied by playing fields that are well located in terms of accessibility for Bridgwater College and Bridgwater residents. If this site were to be selected by EDF Energy it will be necessary to demonstrate that replacement facilities of equal quality can be provided.

Sedgemoor District Council are fundamentally opposed to the inclusion of search area BRI-D, which is considered to be poorly located with respect to existing facilities and current and proposed public transport links. It is also located outside the defined settlement boundary and is considered to offer poor prospect of legacy uses that would benefit the population of Bridgwater. Proposals for accommodation at BRI-D would not be considered acceptable by Sedgemoor District Council.

Search area BRI-D has a long and complex planning history but offers no overriding legacy benefit for its inclusion. Although the long standing proposal for a hotel is mentioned, this has been undeliverable for a significant number of years and should not be treated as justification for locating a campus in what should be considered an wholly inappropriate location.

Matters that will further influence accommodation proposals and the design of schemes are as follows:

- All four search areas are located in Flood Zone 3a. PPS25 states that, in this zone, developers and local authorities should seek opportunities to reduce the overall level of flooding in the area through the layout and form of the development and the appropriate application of sustainable drainage techniques;
- The northern extent of search area BRI-D contains a Site of County Importance for Archaeology. Policy HE12 advises that planning permission will not be granted for development which would damage or destroy locally important archaeological remains, unless the importance of the development outweighs the local significance of the remains;
- Further information is required on the demographic make up of households to be located in Bridgwater, so that health, education and other community infrastructure requirements can be assessed;
- The Strategic Housing Market Assessment, adopted by Sedgemoor DC in 2009, estimated that there was an annual affordable housing requirement of 891 units. The Council are keen to discuss with EDF Energy how the provision of affordable housing might be secured as a legacy benefit of campus development and how the layout of development could be influenced to secure appropriate dwelling mix.

There are a number of further sites in the Bridgwater area that Sedgemoor District Council consider would be suitable for the development of accommodation for construction workers. Central considerations for the selection of sites should be the Bridgwater Vision and the Council's Strategic Housing Land Availability Assessment. From these documents an understanding can be developed of the key aspirations for the future regeneration and development opportunities within Bridgwater and the likely timescales and constraints of individual sites. We are therefore disappointed that further sites have not been considered at this early stage given the information within these documents. To assist such additional assessment Sedgemoor District Council have highlighted the following sites which we feel could have a role to play and should be fully considered and at least discounted for potential campus locations. The identification of these additional sites in Bridgwater should also be

used in any review of the areas of search identified within Cannington. The suggested sites are:

- Redevelopment of former Gerber Factory at Wembdon Road, Bridgwater – allocated brownfield site in the adopted Local Plan for housing. Locational advantages for Hinkley Point being on the western side of the town. Will provide opportunity for interim use to deal with site constraints, leaving serviced site for open market housing in middle phase of plan period.
- Chilton Road Caravan Site, Chilton Trinity – Existing residential caravan site, limited remaining occupancy. Adjacent to Chilton School. Flood Zone 3a. Given current use and nature of site would suit temporary accommodation. Limited lead-in concerns. Within walking distance from town centre and situated just off of Northern Distributor Road for movements west to Hinkley.
- Redevelopment of Haygrove School – Will be vacated by relocation of school to alternative site. Brownfield site not at flood risk. May provide for serviced site in advance of expectations. Timescale likely to be constraint.
- Land east of Taunton Road – Allocated site in the Local Plan, partially redeveloped for Medical Centre, remainder remains undeveloped. Flood zone 3a. Could kick start redevelopment of remainder of the site. Again flexibility of building structure will be important for legacy issues.
- Bowerings Mill, The Docks – Allocated site for redevelopment. Currently relocation of existing employer held up by infrastructure issues serving new site. Mill redevelopment would suit flatted development. Flood zone 3a. Would suggest that single bedroom flats could be constructed with a view to future reconfiguration to 2/3 bedrooms when no longer required for temporary accommodation.
- Land at Monmouth Street – Allocated site, previously cleared. Flood zone 3a. Close to town centre and limited constraints. Would suit some flatted development. Redevelopment delayed because of economic climate. Interim use could bring site forward earlier. Again opportunities for flexible build and later reconfiguration match housing type and size profiles.
- Former Bigwood and Staples, Church Road – Cleared site, redevelopment delayed as a result of economic climate. Would suit flatted development. Flood zone 3a. As above flexible build could be appropriate.

Sedgemoor DC are concerned to see that the potential future uses for the identified areas of search are collectively listed in table 4.10 of the Stage 1 Consultation Document rather than being site specific. As stated in section 3.2.3, the legacy benefits should be seen as significant starting point for the overall strategy for locating the associated development and in particular the identification of individual search areas. The identified areas of search vary greatly in nature and their ability to provide long-term legacy benefits and should be individually assessed.

3.7.1 Observations on Technical Issues

Land Contamination and Waste

Further contaminated land assessments/surveys are to be undertaken by EDF Energy on relevant sites. These will need to be reviewed and approved by Sedgemoor DC when they are completed. The following sites have potential risks associated with them:

- BRI-A North East Bridgwater
- BRI-B Cattle Market
- BRI-C Bridgwater College, Bridgwater Rugby Club, Bridgwater Football Club

Air Quality

Further Air Quality assessments are to be undertaken by EDF Energy. The methodologies will need to be consistent with current UK guidance and the methods and results will need to be approved by Sedgemoor District Council.

3.8 Combwich Wharf

Combwich Wharf is being considered as a location for the delivery of freight by water, via the refurbishment of the existing wharf; and the use of land adjacent to the wharf as a freight consolidation/storage facility for water-borne freight.

The Stage 1 Consultation Stage 1 document identifies a series of planning matters that apply to the Bridgwater residential search areas, which have been supplemented here with policy guidance where relevant:

- The Core Strategy Preferred Option refers to the likelihood that the wharf would need to be enlarged and improved in order to accommodate significant construction related loads should the Hinkley Point C nuclear proposals go ahead. It also states that it is important that opportunities to exploit harbour assets are supported as they can potentially play an important role in future economic activity in the area. Policy TM7 of the Local Plan safeguards the wharf from other types of development;
- The principle of the use of Combwich Wharf is also supported given its potential to minimise the amount of freight transported by road;
- The search area is located adjacent to a number of Sites of County Importance for Archaeology. Policy HE12 advises that planning permission will not be granted for development which would damage or destroy local important archaeological remains, unless the importance of the development outweighs the local significance of the remains;
- The northern part of the search area is located in an area of high quality agricultural land, designated as Best Agricultural Land in the Local Plan. PPS7 recommends that development is avoided on land of this quality wherever possible;
- Combwich Reach forms part of the Severn Estuary Special Area for Conservation (SAC) and Special Protection Area (SPA) and is designated as a SSSI. The existing wharf is excluded from this designation, however the potential affects of construction and operation will need to be considered through an Appropriate Assessment;
- Search areas J23A and J23B are located in Flood Zone 3a. PPS25 states that, in this zone, developers and local authorities should seek opportunities to reduce the overall level of flooding in the area through the layout and form of the development and the appropriate application of sustainable drainage techniques.

The rationale for the refurbishment of Combwich Wharf and provision of a consolidation/storage facility is supported by Sedgemoor DC on the basis that road freight trips will be reduced. Siting of the consolidation facility for waterborne freight at Combwich is considered to be preferable over the North West Cannington (CAN-B) option for this reason.

The policy presumption is for strict control of development outside the defined settlement boundary of Combwich, although it is acknowledged that there is a special case for associated development linked to Hinkley Point C. In this instance, it is the initial view of the Council that the benefits of water-borne freight transportation outweigh the loss of agricultural land. In developing the proposals for Combwich further, EDF Energy area advised to address the following matters:

- Further consultation with Sedgemoor District Council, Otterhampton Parish Council, and Otterhampton Parish Recreation Association should be carried out to understand opportunities for restoration or legacy uses of the proposed development.
- Full restoration or legacy proposals should be presented where the temporary freight consolidation facility will be located on agricultural land;
- Combwich Ponds, located adjacent to the search area, is designated as a County Wildlife Site. The ponds are also a popular site for angling. Local Plan Policy CNE9 advises that where planning permission is sought for development which would damage the nature conservation value of a site, such damage should be kept to a minimum and mitigation or compensation measures provided. Developers are encouraged to make positive provision for wildlife through appropriate habitat creation/restoration and subsequent management.
- Further consultation should be undertaken with the Port of Bridgwater in relation to the design and operational requirements of the wharf;
- If consolidation storage facilities are to be located within the search area they should be located in an area where visual impacts on the openness and character of the countryside can be minimised.

3.8.1 Further Observations on Technical Issues for Combwich Wharf

Marine Water and Sediment Quality

The data gap in marine water and sediment quality data should be filled. Non-radiological parameters for marine sediments, and non-radiological and radiological parameters for the water column should be obtained and stated in full within this section. These should be contemporary samples rather than historic data. Desk based studies should be supplemented with contemporary surveys and sampling. Furthermore, details should be provided on the approach to numerical modelling of the estuary, including previous studies completed that might be relied upon. An allowance should be made for hydraulic and morphological modelling of the estuary. Confirmation is also required on whether consideration has been given to monitoring suspended sediment levels from pre-construction through to post-construction.

The sediment disturbance and contaminant mobilisation studies and discharge of contaminated surface water discharges studies are both considered adequate. However, there is no mention of any ‘hardening’ of the river bank (replacing ‘soft’ edges) to accommodate the development. Confirmation is thus sought on the structural form of development e.g. whether it will comprise piled/piered structures rather than solid steel sheet piled wall.

Hydrodynamics and Coastal Geomorphology

Whilst tide and sediment transport direction is presented in this section, no information on flow velocities or sediment volumes (transported) have been included. Furthermore, the status of the estuary as ebb or flood dominant should be confirmed as well as the discharge of the river. It would also be helpful in this section to understand the existing tidal prism.

Under the proposed studies this section confirms that an assessment of sediment transport patterns will be completed. Further detail on the methodology for this study should be included. Details should also be provided on the approach to numerical modelling of the estuary, including previous studies completed that might be relied upon. It is also recommended that hydraulic, sediment transport and morphological modelling of the estuary be allowed for under future studies.

Whilst this section provides an acknowledgement of impacts on erosion and accretion, any changes in flow velocities and directions identified should include consideration of latest climate change predictions (this is uncertain at present).

Drawings/graphical material accompanying this section do not confirm the net change in area, and specifically confirmation should be provided of any reduction in cross-sectional area of the River Parrett. The inclusion of cross-sections to show interface with the River would be a helpful addition.

In general terms, more information is required on the assessment to date, and the proposed studies which will be undertaken in the future. A programme of hydraulic, sediment transport and morphological modelling should be provided in the project programme.

Marine and Coastal Flora and Fauna

Whilst the baseline is considered generally adequate, for example the International designations are acknowledged, there are certain significant omissions including the National designations (e.g. SSSI) are not noted.

There is a degree of uncertainty on this section as to whether there will be a separate Environmental Statement for this element of the works or whether the Combwich Wharf will be assessed as part of the main development site underpinning the Development Consent Order application. Whilst it is understood to be the latter, this is not evident from the Stage 1 Consultation Document. It is thus recommended that the purpose of the Consultation document in the context of the approach to planning applications and the planning documentation that will be produced for each element, e.g. Combwich Wharf, be clearly stated.

Whilst consultation with Natural England on future invertebrate sampling is considered adequate and the proposed approach to fisheries equally so, no further bird studies are currently proposed. There is thus a query on how the impact on the overwintering bird population will be assessed. It is recommended that further engagement with Natural England and RSPB be made in terms of defining future studies of overwintering birds.

Transportation (Marine)

No information provided on how existing river users will be affected by the proposed development and no information provided on the design vessel(s) in this section. A desk based assessment on existing navigation would be a suitable addition.

In terms of future studies, no marine transportation studies are currently proposed. The proposed desk based assessment on existing uses needs to consider future needs of the river for navigation (this assessment of navigation is considered an omission).

Whilst external information confirms that the Port of Bridgwater Harbour Master has been consulted on navigation matters, (understood through the Marine Authorities Liaison Group) this should be detailed in full within this section of the Stage 1 Consultation document.

Land Contamination and Waste

Further contaminated land assessments/surveys are to be undertaken by EDF Energy on relevant sites. These will need to be reviewed and approved by Sedgemoor District Council when they are completed. If these surveys identify contamination risks then further work may be required.

Air Quality

Depending on predicted usage and access routes air quality assessments may or may not be required. This should be confirmed through consultation with Sedgemoor District Council.

3.9 Williton

Williton has been identified as being a potentially suitable location to accommodate a campus for up to 200 construction workers with associated living and recreational facilities; and a park and ride facility to accommodate up to 350 cars.

The Stage 1 Consultation Stage 1 document identifies a series of planning matters that apply to the WIL-A and WIL-B search areas, which have been supplemented here with policy guidance where relevant:

- West Somerset DC is at an early stage of Local Development Framework preparation and is currently considering a series of options for the siting of future development. Williton has been identified as an area with potential to accommodate future development;
- Paragraph 4.11.6 of the EDF consultation document advises that the search areas are outside the flood plain, however the Hydrology, Drainage and Flood Risk section of the Environmental Status Report states that both search areas are located within Flood Zone 3a;

The rationale for providing a Park & Ride facility and residential campus at Williton is understood to be:

- A Park and Ride at Williton will capture construction workers travelling from the west, minimising the number of vehicle movements along the road network to the Hinkley Point C site, although there remain questions regarding the large capacity of the Park & Ride facility;
- New development will contribute to the provision of services, employment opportunities, infrastructure and transport in and around the town;
- The areas of land have potential to accommodate development in locations that promote greater self-containment of the settlement.

It is understood that EDF currently do not have a preference for either of the Williton search areas, and that selection of a search area will depend on the results of Environmental Impact Assessment work and feedback from the Stage 1 consultation work. It is the initial view of West Somerset Council that the provision of an appropriate amount of residential accommodation and a Park and Ride at the western search area (WIL-A) would be preferred. A number of reasons are put forward for this:

- A Park and Ride to the west would reduce the number of vehicle movements associated with the construction work through the centre of the village;
- Search area WIL-A benefits from closer proximity and accessibility to the village centre than the WIL-B location, meaning that it is an appropriate location for recreation facilities with ongoing legacy benefits for the village.
- The establishment of a vehicular access route through the site could assist in reducing congestion at other junctions in the village and enable housing development at the search area in the future. The emerging RSS allocates the provision of around 2,500 homes by 2026 to West Somerset.

The opportunity for West Somerset to input to the selection of a site and the layout of access and buildings is welcomed in the context of ongoing Local Development Framework preparation. West Somerset Council would also be willing to discuss search areas in other parts of the District, notably Minehead and Watchet.

In order for West Somerset Council to confirm support for one or both sites the following matters will require further consideration:

- Clarity is required on the level of flood risk for each search area and flood implications of further development on the village centre, which falls within the flood plain of the Doniford Stream and its tributaries. A comprehensive approach to flood risk management in the village will be required;
- West Somerset Council is firmly of the view that any development taking place in Williton has a long term, sustainable legacy and is placed in a location that will allow suitable separation between existing development whilst allowing successful long term integration with the town. Development needs to be located where it can deliver long term benefits to the town whilst being positioned to minimise the traffic implications in the immediate vicinity of the site and on the local traffic network. With this in mind the suitability of search area WIL-B with its access onto the A358 is questioned given the majority of the traffic (both from a residential campus and from workers living further from the site from Williton;
- Further consultation with Williton Parish Council and West Somerset Council should be carried out to understand opportunities for legacy use of residential development. EDF have presented a range of potential legacy uses including hotel, sheltered accommodation, commercial and community. An assessment of the ongoing viability of such uses will be required to inform proposals. Mechanisms for the provision of affordable housing must also be explored. West Somerset Council's Planning Obligations SPD (draft) advises that there is a current and projected acute shortage of housing for local needs in West Somerset. It would thus seem appropriate for EDF to consider how the provision of affordable housing might be secured as a legacy benefit of campus development and how the layout of development could be influenced to secure appropriate dwelling mix;
- In addition to the workers accommodation West Somerset Council would require that any leisure related facilities provided for any accommodation was also designed with a long term legacy for the town. The Council would like to explore any practical opportunities for the existing residents of the town to make use of the leisure facilities whilst construction is still taking place.
- Further information is required on the demographic make up of households to be located in Williton, so that health, education and other community infrastructure requirements can be assessed in accordance with the Council's Planning Obligations SPD.
- Further consideration must be given to potential legacy uses of the Park & Ride site, which may have a role in easing congestion on the A39 related to tourist traffic.
- On completion of the underlying work to establish the magnitude of development that may or may not be required in Williton the authorities urge EDF to consider a further round of consultation , in advance of the Stage 2 consultation, where the authorities and residents can consider the site currently proposed along with any others that maybe more suitable once the quantum of development is confirmed and the transport implications of the development are better understood.
- West Somerset Council understands that discussions are underway with the West Somerset Railway about EDF using the railway in some capacity to bring workers from Taunton to Williton and then by bus to the Hinkley Point site. The Council would like to fully support the exploration of this option and would welcome the opportunity to discuss the detailed elements of this work to fully understand the implications of the proposals.

4 Technical Evaluation (Approach to Sustainability)

4.1 Introduction

This section provides a review of the Approach to Sustainability defined in section 5 of the Stage 1 Consultation document.

4.2 Observations on Approach to Sustainability

A considerable emphasis within this section is made to the Government White Paper Meeting the Energy Challenge: A White Paper on Nuclear Power (2008). Furthermore, reference is made to the Nuclear National Policy Statement and the accompanying Appraisal of Sustainability for Hinkley. Whilst reference is made to the Nuclear NPS and Appraisal of Sustainability, the key conclusions are not referenced directly in this section of the Stage 1 Consultation document.

Under section 5.3.2 reference is made to the commitment from EDF to a Sustainability Statement for Hinkley Point C. Whilst this is welcome, it should be ensured that the Sustainability Statement addresses all elements of the development proposals including Preliminary Works; Off-site Associated Development; Hinkley Point C and Southern Construction Areas. The UK Low Carbon Transmission Plan (July 2009) refers to the need to cut emissions through efficiency measures, in addition to the need to invest in clean energy technologies such as nuclear. Associated Development proposals would therefore be expected to meet the most stringent energy efficiency and environmental standards, which should be tested through externally certified assessment methods such as CEEQUAL, BREEAM and the Code for Sustainable Homes.

Whilst the range of issues discussed within the proposed Sustainability Statement (economic diversification and employment; socio-economic renewal and environmental benefits) are welcome in broad terms, it is recommended that these be tied into specific key performance indicators which allow a mechanism for measuring the active pursuit of sustainability initiatives. It is strongly recommended that these be evaluated to ensure alignment with the Regional Spatial Strategy Sustainability Appraisal Framework including the Sustainability Appraisal (SA) objectives and indicators therein. Furthermore, this should reference SA objectives for the Sedgemoor District Council and West Somerset Council Local Development Frameworks (LDF).

The authorities are particularly concerned to ensure that the construction of Hinkley will not worsen their performance against National Indicators included within the refreshed Somerset Local Area Agreement (March 2009):

- NI 185 - CO2 reduction from LA operations
- NI 186 – per capita CO2 emissions in the LA area

It is anticipated that per capita CO2 emissions will increase substantially once the construction of Hinkley Point C commences and therefore mitigatory measures will be required. These could include financial support for the retrofitting of existing residential developments with energy efficiency measures and the establishment of local-scale heating and energy networks.

Reference is made in section 5.3.6 that there is an expectation that the draft Nuclear NPS will provide guidance on the sustainability of a national scale nuclear programme. This is not explicit within the draft NPS and it is recommended that EDF demonstrate the sustainability objectives for the Hinkley Point C proposals in the context of national initiatives for the development of a national supply chain; economic renewal; educational initiatives; environmental stewardship; carbon reduction and security of supply.

5 Technical Evaluation (Approach to Community Benefits)

5.1 Introduction

This section provides a review of the Approach to Community Benefits defined in section 6 of the Stage 1 Consultation document.

5.2 Adequacy of Baseline

The baseline description on community benefits includes limited reference to aspirations from within the community or its elected representatives and the subsequent filtering of aspirations in relation to what might be feasible in relation to a community benefits strategy.

This section presents community benefits in terms of project attributes and characteristics rather than any holistic approach to managing a long term commitment and no precedent or transferable experience is offered to demonstrate how EDF has managed community benefits projects on other projects.

No definition has been offered concerning what EDF constitutes as “community benefits” as opposed to discrete measures aimed at specific mitigating actions (paragraph 6.1.3).

Whilst the inclusion of basic employment and skills statistics is welcome throughout the Stage 1 Consultation document but this is not placed in context. Equally, references to economic resilience are included in this section but findings have not been contextualised. There is limited information on enterprise/SMEs and this is an important omission as these could compete for some of the sub-contracting opportunities.

The section appears to be structured around an inventory of measures covered in other parts of the document or line items in an inventory. It does not present any firm basis for how EDF will support communities over a longer time frame and this needs to be considered as this work develops.

The evidence base includes limited references to community need and the management of need in relation to a realistic level of support funding. In addition, options have not been presented for the purposes of developing an approach to community benefits or a route map to get to a preferred option for long term engagement.

Projects funded through a community benefits strategy offer a more immediate mechanism for creating work opportunities for hard to reach members of the community rather than directly through the project itself. Further consideration should be given to how the training and procurement strategies might be used to procure services from projects established using this funding.

With the exception of employment and skills descriptions, which are considered to be a requirement under a planning obligation strategy in any event, there is a limited amount of detail on a strategic approach to economic regeneration and the delivery of local facilities/services (community benefits). Clearly, achieving community benefits would have to be undertaken in partnership with local communities if sustainable and worthwhile projects are to be developed.

There is a limited basis presented in this section to understand whether it is EDF’s intention to look for financial sustainability or whether the intention is to make general investments in projects with a social objective (without seeking a financial return). The strategic approach should be defined in this section.

Further information is required from EDF on the non-financial participation in the community e.g. there may be scope for targeted enterprise support from the company e.g. guidance from the company’s young accountants or business development people to work with social

enterprises/community groups to prepare business plans/procurement to run the community facilities referred to above. Further details would be welcome in this section.

5.3 Observations on Strategy (Community Benefits)

The scoping of a specific community benefits strategy is absolutely essential to maintaining the long term viability of the project. The strategy should outline EDF's view on how funding to support community benefits is to be delivered (for example through annual payment, lump sum, geographic definition, and so forth) over the longer term including the exploration of strategic options ranging from a long term investor in communities to a short term provider of capital grant financing.

The community benefits strategy should provide guidance as to how legitimate needs that are not yet definable may be addressed in the future. This mechanism is not currently included in the Stage 1 Consultation document.

The principles for supporting projects that are likely to emerge from within the community need to be articulated and clarified e.g. what weighting would be given to the management of intergenerational effects (particularly the pre and post operational phases). This is seen a particularly important in ensuring long term legacy benefits are realised.

Options for governance structures need to be explored including how EDF will carry through any corporate social responsibility to impacted areas. These options should consider a social enterprise delivery model appropriate for discharging long term responsibilities.

Consideration should be given to the balance between supporting capital and revenue projects and the investor principles to be applied (e.g. where asset investments generate a return for the community which can be used to support revenue costs).

It would be helpful if the boundaries for the disbursement of funding to projects were to be defined to the geographical areas which bear the impact of the site and its construction, operation and decommissioning, in Sedgemoor and West Somerset.

Expectations concerning funding leverage from other social partners should be established. It is currently unclear as to what role other social partners may play e.g. other key suppliers and the general business community and third sector enterprises. This should be stated in this section.

5.4 Recommended Additions

In addition to the above issues the results from the community consultation in terms of aspirations for community/ social investment should be presented in full. A mechanism needs to be defined by EDF to address local aspirations based on options for community benefits.

Whilst there is reference to displacement effects and other impact studies these need to be defined and gap analysis undertaken i.e. context within the region needs to be provided.

There is limited indication from the evidence presented in this section as to what form the community benefits should take over and above employment and skills/workforce development. Further information is required in this respect.

5.5 Consultation and Engagement

Confirmation is included within this section that impact studies have been undertaken and issues discussed with local stakeholders although this is not discussed in detail. It is not clear as to the extent of dialogue with partners and communities if the "*package of facilities which the local community can enjoy*" has been taken forward into an action plan or the basis of an agreement. This should be investigated further.

5.6 Summary Comments

This section addresses employment and skills which can be linked back to the Environmental Status Report. The list of mitigation measures is more difficult to link back and further information would be required in respect of:

- Community development;
- Pre-access training;
- Construction training, employment and enterprise;
- Employment and skills in relation to the operation;
- Community development initiatives e.g. community business/social enterprise start-up units;
- Mitigation measures e.g. transport.

6 Technical Evaluation (Training Strategy)

6.1 Introduction

This section provides a review of the training strategy defined within section 7 of the Stage 1 Consultation document.

6.2 Adequacy of Baseline

This section of the Stage 1 Consultation document includes limited reference baseline material. This is an omission as the context for the strategy must be driven by an awareness of local training and development challenges and opportunities.

Data is available in external reference documents and the ESR in Appendix A.1. Within external documentation data is available on worklessness and deprivation; NVQ levels within the local area and specific deprived neighbourhoods in both LADs based on IMD data.

A lower local labour content has implications for the assumed distribution of the workforce used in modelling travelling patterns as migrant labour is assumed to cluster nearer to the site.

The potential barriers to securing workforce participation by key groups needs to be considered further in the baseline section. The reference made to the Flamanville experience in relation to targeting the “under privileged” requires further elaboration and does not provide sufficient information at this time.

The nuclear reactor island technology providers are foreign owned entities. It is possible that they may have a preference for working within their pre-existing supply chains. It is unclear why these parties will absorb the cost implications of recruiting low productivity staff in the baseline section at present.

No reference is made within the baseline section on bridging the gap between the phases of the project. Specifically, further information is required on how local people engaged on the construction phase may transfer to permanent opportunities created during the operational phase. The absence of a reference to upskilling is an omission in this section.

6.3 Observations on Strategy (Training and Recruitment Objectives)

It is recommended that a detailed profile be included of non Job Seekers Allowance (JSA) “out of work” benefit claimants in analysis especially those considered “economically inactive” who would be interested in returning to work. Data from the Annual Population Survey suggests that there are 6,200 persons (representing 7.5% of the economically inactive) in Sedgemoor and West Somerset interested in re entering the workforce (NOMIS, April 2008 to March 2009). This has direct relevance to the achievement of the adopted Local Authority Area (LAA) target NI152.

Local labour content in more recent studies is substantively below the 50% assumption level section 7.1.6 quoted in the Stage 1 Consultation document[5]. Estimates for a reactor project in the Netherlands concluded that the construction phase may have a Dutch content of between 3% to 12% based on type of job at it’s peak. Data from the Olkiluoto-3 project in Finland has recorded only one third of the workforce on site being of Finnish origin. This study expected that the main contractors currently engaged on bringing forward the next generation of reactors were already in the process of creating an international pool of construction and installation workers capable of moving between reactor projects within Europe (following a pattern established in the conventional power sector). Given a contractor preference for construction teams with nuclear experience, members from this

[5] Nuclear Employment CE Delft (2008)

pool are likely to be highly attractive compared to others (e.g. people who have worked on Flamanville and Olkiluoto-3. Assuming high labour mobility on major construction projects, members of this pool are likely to be recruited in preference to others in the locality that has no such experience.

The standardised parts produced "off site" are also likely to generate a contractor preference for specialised labour from a proprietary supplier who is unlikely to be locally based (although they may come other parts of the UK). Most local jobs were considered to be induced by services purchased by construction workers (an interpretation recognised in paragraph 3.17.16 of the Environmental Status Report). It is recommended that further sensitivity testing be undertaken in relation to a lower local labour assumption and its effects on the distribution of the workforce arising from a lower percentage.

The optimal size of a European construction skills pool in nuclear reactor construction will, in part, be influenced by the number of concurrent projects within the overall build programme. Demand for a particular skill simultaneously across a number of sites implies a larger labour pool to deal with the capacity problem. Consideration should be given to the relative phasing of construction programmes across the whole UK and, indeed, European fleet. This factor will have a knock on consequence for the local labour content that can reasonably be assumed on the Hinkley project. This has particular relevance to the achievement of LAA Target NI151 related to high level skills.

Study could benefit from a bottom up analysis of the labour demand relative to labour supply using SOC categorisation. This would help validate the assumed local labour share of different occupational groups identified in paragraph 7.1.6 especially in relation to the category termed "civil, mechanical and electrical" operatives where recent labour market data suggests there has been a contraction in the LADs located near to the reactor site. This has specific relevance to the achievement of LAA Target NI165.

The baseline needs a fuller account of the likely workforce implications arising from "associated development" and preliminary development e.g. the creation of hostel accommodation and "park and ride". Whilst these are likely to be of a lesser order in terms of skills content and quanta of labour, there may be better opportunities for local exploitation. This has a specific relevance to the achievement of LAA Target 152.

The Environmental Status Report uses a 20% contingency allowance in calculating peak employment used in other parts of the document. Is this figure related to a specific productivity differential between Flamanville and what might be assumed to apply in Hinkley.

No reference is made to how the Training Strategy will deal with the issue of displacement. Although displacement is discounted in the supporting EIA document, other data suggests that displacement is more probable as the skills content increases. Sectors of the local economy that currently employ people on electrical and mechanical engineering tasks may loose them to the project if the wage differentials are significant and the tasks of sufficient duration to offset the temporary nature of the work. The Training Strategy must therefore consider what measures may be needed to "backfill" work opportunities vacated by local people engaged on the project. The stance taken in the EIA could be considered high risk until more information is known on the hiring policies of companies engaged in the supply chain. Based on another study, "backfilling" may be a particular problem for during the operational stage of the project. This has specific relevance to the achievement of LAA target NI151.

Opportunities for increasing the quanta of skill employment in the local area are identified in paragraph 7.1.1. and listed objectives under paragraph 7.1.4. The role of the proposer in responding to the "challenge" (paragraph 7.1.1) is heavily conditioned in the statements made in paragraph 7.1.3 indicating the limited powers available to the proposer in relation to recruitment across the supply chain. The proposer defines its role as "*to co-ordinate and facilitate*" adequate training and recruitment processes.

There is currently no differentiation of those in receipt of "out of work "benefits in terms of the barriers presented to get back to work and securing specific job outcomes in the project or through associated development. This has particular reference to the achievement of LAA Target NI152.

6.4 Recommended Additions

In addition to the areas of incomplete material outlined above, it is recommended that EDF scope a route map for different groups of people on "out of work" benefits describing how the project could create opportunities for different groups targeted by the LADs. Significant differences exist in getting working age people experiencing incapacity as a result of long term illness, etc compared to persons recently made unemployed as a result of the recession. This has particular reference to NI152 and NI153.

Furthermore, it is recommended that there is explicit recognition of LAA targets in the "Training and Procurement Strategy" rather than just as a reference in external socio-economic data to certain community related LAA Targets. There is also a need for a local labour requirement across the project to be owned by the proposer and responsibility taken from delivering the hard targets.

6.5 Consultation and Engagement

There is a need for EDF to demonstrate how Bridgwater College will work alongside community development organisations and organisations such as Homes in Sedgemoor, to effectively reach certain difficult to reach target groups especially at a neighbourhood level and amongst sub groups of the economically inactive. The engagement strategy should be detailed in this section (cross referenced with paragraph 7.2.5) identifying the Logistics Academy, the Taunton based Construction Skills Academy and the Somerset University projects. It is recommended that these references be consolidated in 7.1.11.

Further information is required on the level of engagement achieved between training providers listed in paragraphs 7.1.11 and 7.2.25 and foreign companies in the supply chain regarding agreements to train specific numbers of local people for specific job opportunities on the project.

The authorities will require a well developed Employment and Skills Charter for local people (at the District level) to evidence that EDF understand the very local issues and make provision for an inclusive approach to raise local ambitions, raise educational achievement, and to seek positive role models from deprived areas as key workers. A detailed action plan will be required.

6.6 Summary Comments

The specific issues identified within this element of the Stage 1 Consultation document which require further information include:

- Local labour content at 50% may over estimate the scale of local labour participation in the project especially for the immediate locale;
- There is a need for a follow-through analysis from baseline analysis to strategy. This is currently unclear especially in relation to creating opportunities for hard to reach groups within the population;
- A clearer link needs to be made to the way "training and employment" can create positive outcomes towards the achievement of LAA targets. There is judged to be a significant risk that the project may not create the level of outcomes likely to make serious in roads on this indicator and more confidence is needed.

7 Technical Evaluation (Procurement Strategy)

7.1 Introduction

This section provides a technical evaluation of the procurement strategy under section 7 of the Stage 1 Consultation document.

7.2 Adequacy of Baseline

This section is characterised by mainly qualitative analysis contained in paragraph 7.2.5. Baseline information on local company capabilities to supply the project is largely absent from the document and supporting information. Reference is made to future work on the development of a database of company capabilities (paragraph 7.2.8) and this is welcome.

Accepting limitations in the data, socio-economic data provided by EDF and external to the Stage 1 Consultation document contains no specific reference to the VAT stock composition of the study area used to analyse the baseline yet this is benchmark indicator used in the LAA targeting framework for Somerset (NI 171 - VAT registration rate per 10,000 adults of the resident population aged 16 and above & NI 172 - VAT registered businesses showing growth).

In the baseline section there is no assessment of the proportion of businesses in knowledge driven sectors with a potential to supply the project (LAA Target LPI (7)). Equally, there is no representation in the baseline of the current state of the knowledge economy (KSI 7) in relation to companies engaged in relevant “High Technology” and “Medium High Technology” capable of supplying the project. This is relevant in terms of the Somerset Economic Strategy which seeks to develop these industries in the County.

7.3 Observations on Strategy (Procurement)

A greater analysis of how the energy plant procurement market is likely to evolve around the delivery of EPR technology. A Dutch study (CE Delft, 2009) has highlighted the technology “lock in” with particular energy plant solutions in the conventional power sector being delivered by a particular group of companies operating across broad regions of world. Whilst prime contractors will want to maintain a competitive market, competition is likely to be international without reference to the locality within which a particular reactor is being built. Opportunities for localities may be restricted to commodity parts (e.g. pipes) and materials (e.g. cement, bricks, and insulation) at lower tiers in the supply network (Mueller, J.D. et al (1996)). Opportunities for materials may be limited by the move towards the modularisation of components / systems at “off site” locations outside the targeted areas for employment gain.

Restriction of local opportunities to the provision of commodity goods may limit scope to “leverage their (local firms) involvement into other new build projects” (paragraph 7.2.7).

The baseline socio-economic data provided by EDF as an external reference to the Stage 1 Consultation document should be expanded to include an analysis of the VAT stock profile for the study area to align with LAA targets NI171 and NI172.

Paragraph 7.2.3 sets out a series of procurement strategy objectives including: “To encourage and facilitate the involvement of local businesses in the supply chain for the nuclear power station”; “Through support for the local supply chain to make a positive contribution to the economic development and regeneration of the local area in line with … local policies”. Paragraph 7.2.3 also includes reference to “where practicable, to stimulate and secure inward investment into Somerset to achieve economic restructuring”. No mention of supply chain opportunities related to associated development are highlighted in this section. The only reference to high technology business is in relation to EDF as an employer during the operational phase (p.188) but there is no reference to the knowledge

economy per se. This is relevant to the achievement of LAA Target LPI (7). Opportunities for EDF to influence procurement are heavily conditioned in the statement that "it is likely that most of these firms will not be directly contracted to EDF Energy" (paragraph 7.2.8) and further information on contracting models would be welcome.

7.4 Recommended Additions

It would be beneficial for the inclusion of an explicit reference to the development of high technology supply opportunities to align with LAA target LPI (7) within "Procurement Objectives" (paragraph 7.2.3). Furthermore, it would be useful to include a reference to the objective of developing VAT registered firms in the study area to align with LAA targets 171 and 172 and to include a reference to procurement opportunities related to "associated development" in paragraph 7.2.3.

7.5 Consultation and Engagement

Paragraph 7.2.10 makes reference to the Hinkley B site supplying practical experience (presumably with the operational phase only). This is not well characterised by skills at the moment and would serve as a useful addition from which to evaluate likely transfer.

Paragraph 7.2.9 includes references to the Business Link and "Connecting Somerset" but there is no specific reference to consultations with South West RDA concerning inward investment opportunities to attract subsidiary operations or expanded capacity within the study area.

The provision for some business development is set out in the Bridgwater Vision and has been communicated to EDF, both on the Green Gateway Business Park but also at the proposed Puriton Energy Park. Further work will be required on the onward investment strategy and the procurement strategy with the District and County Council's. It is suggested that any planning consent required for inward investors may need to be considered by the local planning authorities and not by the IPC.

7.6 Summary Comments

The key elements arising from the review of the proposed procurement strategy are:

- The chapter identifies the key statements of principle in relation to supply chain development (paragraph 7.2.3);
- The chapter also identifies the typical toolset used for developing supply chain initiatives (paragraph 7.2.9);
- The absence of an evidence base relating local capabilities with project requirements does however mean it is not possible to identify specific hard targets or assess the realism behind the high level objectives set in 7.2.3;
- The development of supply chain opportunities may not necessarily lead to job opportunities for local people without parallel development of skills development. Without intervention, local firms securing contracts could recruit migrants or the existing employed to fulfil orders;
- More information is required concerning current links between the training provider community and companies likely to participate in the supply chain;
- Understanding the nature of the business base in the study area is essential to making any informed comments on whether the EDF procurement strategy is likely to lead to acceptable outcomes for the locality;
- The energy plant procurement market suggests that there are many barriers to achieving outcomes of the type desired by local stakeholders. Evidence presented in the section 7. does not explain how these barriers can be reduced effectively;

- SWRDA and specifically the authorities may be able to assist in relation to opportunities for inward investment related to the project and consultation is strongly encouraged;
- More information is required over the contacts that exist between existing training providers identified in paragraph 7.2.5 and possible supply companies;
- Access to any feedback from Areva procurement events that have already been held would be a useful addition to this section;

8 Other Issues

8.1 Appropriate Assessment

The baseline and terms of reference associated with the Appropriate Assessment are deemed adequate for this scope of work. It is recognised that the potential need to prepare an Appropriate Assessment will be determined during the Environmental Impact Assessment process. An Appropriate Assessment would need to be prepared if the works are likely to or it cannot be ascertained whether they would, either alone or in combination with other plans and projects, have a significant adverse effect on a qualifying feature of a European site. External references to this Stage 1 Consultation document (including the meetings of the Marine Authorities Liaison Group (MALG) indicate that there is a high degree of exchange of information around the AA requirements between EDF and statutory consultees.

8.2 Cumulative Assessment

Section 5.2 describes the process for cumulative assessment. Whilst recognition as to the importance of cumulative assessment is welcome, there is limited information within the Stage 1 Consultation document on the list of possible / probable projects that may be considered nor the process by which the interactions of these projects will be evaluated. It is recommended that EDF identify the list of projects which it intends to evaluate as part of the cumulative assessment, including the elements of the project (Preliminary Works; Off-site Associated Works; Hinkley Point C and Southern Construction Sites) and those infrastructure proposals within the area which have common timeframes for development; operation and decommissioning.

Reference to the potential cumulative effects of the decommissioning of the B Station and construction of Hinkley C is welcome (section 5.2.4), however all aspects of the decommissioning (particularly transportation and effects on air quality / noise) should be considered in detail with the construction process. Given the relative proximity of the proposed Oldbury Power Station to the Hinkley C development, it is recommended that cumulative effects be considered in full (particularly associated with effects on coastal management and thermal plume). This process should be informed by and in turn inform the Habitats Regulations Assessment Appropriate Assessment.

It is recommended that significance criteria be developed by which cumulative effects may be evaluated. This is currently absent and without its inclusion, it is not possible to determine the relative cumulative effect.

The programme and activities for all projects considered under the cumulative assessment (including the stage of construction, operation and decommissioning) should be stated within the cumulative assessment process.

8.3 Environmental Management

The inclusion of a commitment to produce an Environmental Management and Monitoring Plan (EMMP) is welcome. The inclusion of a reference to CIRIA *Environmental Good Practice on Site* and Environment Agency Pollution Prevention Guidelines (PPG1, 5, 6, 7, 13, 18 and 21) is also welcome.

The EMMP should provide a mechanism to record commitments / agreements carried through from the Environmental Statement produced for all aspects of the development and including all aspects of consultation (particularly that related to environmental control).

8.4 Decommissioning

Whilst it is recognised that the decommissioning process will be the subject of the Nuclear Reactors Environmental Impact Assessment for Decommissioning Regulations 1999 it is

anticipated that more information will be provided during the development of the Stage 1 Consultation document. In particular, the arrangements for long term monitoring and its relationship to the future decommissioning strategy should be included in full. Provisions for long term custody of the site and environmental responsibility should be set out as guidelines to underpin the future decommissioning strategy for the site.

9 Observations on Preliminary Works

9.1 Introduction

This section describes the review of the preliminary works element of the Stage 1 Consultation document (Section A.3). As described in this section, the preliminary works comprise on-site clearing of vegetation; re-routing rights of way; providing utility connections and site terracing as well as construction of a new sea wall and a temporary aggregates jetty and associated storage.

1.2 Observations on Preliminary Works

It is understood that EDF intend to submit applications for preliminary works in advance of the submission of an application for the main project and associated development to the IPC. It is also understood that a planning applications will be submitted to the local authorities (principally West Somerset Council) for some of the preliminary works and a Harbour Empowerment Order Application will be submitted to the Department for Transport for the construction of a temporary aggregates jetty. Given that the design of these preliminary works should be at a relatively advanced stage, with applications likely to be submitted in March 2010 (according to EDF's programme), it would be expected that further details of these works and consent processes would have been made available as part of the Stage 1 consultation material.

The authorities are concerned that the information made available on the preliminary works has not allowed the public to influence the development of these elements of the overall project. No options have been presented and little information on the details of the proposals was made available. There is significant local concern about these elements of the project and to date no proper justification has been offered regarding the need for these elements of the project other than notional commentary on EDF's programme.

The Stage 1 Consultation document is focused on Hinkley Point C as a whole and the significance of individual project elements, including the preliminary work, appears to be overlooked. The temporary aggregates jetty and other preliminary works are treated almost as a necessary step in the construction process rather then elements of the 'project' in their own right. Further details would thus be expected to be provided on preliminary works aspects of the proposals as well as other elements of the project, including the construction of the jetty, new sea wall, cooling water intakes and outfalls, and refurbishment of Combwich Wharf. This information should be provided and discussed with the local authorities and the relevant statutory bodies prior to submission of any preliminary work applications. In addition, the authorities require further information on the planning strategy for these applications, including the consultation activities programmed for all elements; the relationship of technical information and the mechanisms to evaluate cumulative effects of the development in its entirety.

1.3 Further Technical Comments

The site preliminary works section includes a description of the anticipated initial works to make ready the site for construction. One aspect of these works is the site terracing. Whilst the broad approach to terracing is described, there is no information on the potential need for excavating rock by blasting. Furthermore, there is limited information on the mechanism for managing excavated material other than a reference to stockpiling. No information is provided on the site control to ensure effects associated with air quality and noise are managed, nor the potential requirement for removal of material from site (and associated traffic issues) where this is not of suitable quality for use as engineering fill. Reference is made to the need for suitable profiling of material and re-vegetation to minimise visual impact but details of this are absent. No commitment is made to generation of visualisation

material (including photomontages) to demonstrate the expected effects upon nearby residential receptors.

Reference is made to the re-routing of surface drainage in this section and the commitments to control sediment. However, information is provided that suggests flows to Holford Stream and a hydrological relationship to the SSSI which lies to the east of the C182. Whilst there is a suggestion that ecological surveys have confirmed limited biodiversity value within the watercourses there are concerns regarding flow of sediment to the SSSI and the effect upon sensitive species. No reference is made to the potential effects on this SSSI in this section and this is considered to be a significant omission.

This section describes the re-routing (or closure) of rights of way within and adjacent to the site. A plan illustrating these rights of way and intended mechanisms to maintain suitable safe access provision should be included. The commitment to engage with Rights of Way Officers in Somerset County Council is welcome.

There is relatively limited information on proposed utility connections and no commentary on expected wayleave implications nor a commitment to evaluate the environmental implications of works to secure these connections. Furthermore, there is no plan accompanying the utilities strategy (either for existing or proposed connections).

Reference is made in this section to the requirement for new access roads and a new roundabout to link to the existing site road network. A plan accompanying these proposals is required. This should be incorporated with the broader transport assessment.

The preliminary works include the demolition of barns and it is noted that bats may exist within these barns. It is anticipated that a full programme of ecological study be completed to evaluate the use of these barns and value as resource to inform a mitigation strategy. It is also expected that there will be continued dialogue with Natural England as noted within this section.

This section makes reference to the removal of hedgerow, felling of trees and loss of grassland and attempts to minimise impacts associated with losses to these features. Reference is also made to the Hedgerow Regulations. At this stage, it is not possible to quantify losses, nor (for hedgerows) set these in these the context of the Hedgerow Regulations. Limited information is included in terms of the proposed mitigation and enhancement strategy to address these losses. Full details of the proposed restoration strategy should be provided.

Reference is made in this section to the proposed sea wall and its description within Figure 10.5. Whilst the broad description of the sea wall is welcome, there is a complete absence of any detail on the form of the structure and it is not possible to identify how the public right of way will tie into this structure. Complete design details (including plans and photomontages) should be provided such that an assessment of this feature can be made.

The jetty and associated storage facility are described in brief within this section. There is a complete absence of any design detail for this construction and limited drawing material to assist with an understanding of its construction. Justification should be provided for the expected HGV movement offset quoted in the Stage 1 Consultation document. It is understood that a Harbour Empowerment Order (HEO) will be made during 2010 and it is expected that full details of the proposal be made available in advance of such an application for public consideration and comment. This detail should include the construction, operation and decommissioning aspects of the proposals.

10 Public Consultation Questions

10.1 Introduction

The Stage 1 Consultation Document makes provision for public consultation questions (A.5) which address various aspects of the development proposals. This section of the technical evaluation provides views on these questions.

10.2 Public Consultation Questions

Question 1: Do you agree that EDF Energy's proposal to provide a landscape buffer on the southern boundary of the site is the best way of minimising the potential impact of the construction site for nearby local residents? If yes, should this be retained as a permanent feature once construction is completed?

10.2.1 Response

The form and expected visual effect of the landscape buffer has not been detailed within the Stage 1 Consultation document. There is limited information on any alternatives to the landscape buffer. There is limited information on future landscape treatment that might be made to the landscape buffer were it to be retained as a feature in the future. Further information / clarity on these issues is required in order to form a response to this question. In particular the following items are requested:

- Confirmation on final form of landscape buffer including plans and sections relative to existing topography;
- Photomontages at key points through to the southern boundary and at varying distances to confirm on scale of the feature in the context of the surrounding area (particularly around Shurton);
- Confirmation of mechanisms to avoid hydrological effects on Brooks (including any flood compensation) measures;
- Commentary on terrestrial ecology effects of developing the landscape buffer is required.

Question 2: There are a number of options for the restoration of the site at the end of the construction phase. What sort of landscape and wildlife features would you like to see included (e.g. return land to its previous use, creation of wildlife habitats, grassland, woodland etc)?

10.2.2 Response

It is strongly recommended that any site restoration be conducted in full consultation with Natural England and with due reference to the Biodiversity Action Plan (BAP) for the area. A range of site restoration / enhancement measures should be put forward indicating the relative opportunities that might ne delivered in terms of securing long term habitat function. Although this question refers to a range of options, these are not adequately detailed within the Stage 1 Consultation document from which a preferred selection of measures can be made.

Question 3: Do you have any comments on the strategy for rights of way across the site during and following construction?

10.2.3 Response

The broad commitment to maintaining Public Rights of Way or appropriate diversions during construction are welcomed where these safeguard the continuing use / accessibility of the Rights of Way and the health and safety of users. There are some concerns regarding aspects of the Preliminary Works (temporary aggregates jetty) not detailed within the

Stage 1 Consultation document. It must be demonstrated that the safety mechanisms to be instituted during aggregate loading will protect users of Rights of Way.

Question 4: What is your view on EDF Energy's initial proposals for managing transport and accommodation during the construction phase?

10.2.4 Response

This technical evaluation includes observations on transport and accommodation at section 2 (Hinkley Point C and Southern Construction Areas) and section 3 (related to Off-Site Associated Development).

Question 5: We are proposing a bypass for Cannington. Do you think the road is needed? If so, should it go to the east or the west of the village? Please give reasons for your preference.

10.2.5 Response

This technical evaluation set out in section 3.3 sets out the assessment of the Cannington Bypass information provided in the Stage 1 Consultation document.

Question 6: We are proposing a mix of solutions for accommodating construction workers. Please give comments on your preferences and any suggestions about the future use of these facilities.

10.2.6 Response

The technical evaluation set out in sections 3.2 and 3.4 to 3.9 provides an assessment of the accommodation strategy and observations on proposals for future use of these facilities.

Question 7: What are your views on the four locations EDF Energy is proposing for the new park and ride sites? Do you think it would benefit the local community for these park and ride facilities to continue to operate once construction is complete and, if so, on which sites?

10.2.7 Response

The technical evaluation set out in sections 3.4 to 3.9 provides an assessment of the park and ride sites and observations on proposals for future use of these facilities.

Question 8: What are your views on the proposed freight handling (consolidation) facilities adjacent to some of the proposed park and ride facilities and at Combwich? What do you think of our proposals for the use of Combwich Wharf?

10.2.8 Response

The technical evaluation set out in section 3.4 to 3.9 provides an assessment of the freight handling sites and observations on the use of Combwich Wharf.

Question 9: What are your views on EDF Energy's general approach to community benefits and do you have any specific suggestions about what should be included in the package?

10.2.9 Response

The technical evaluation set out in section 5 provides an assessment of EDF's approach to community benefits.

Question 10: Do you have any comments on our proposals in relation to training and business opportunities?

10.2.10 Response

The technical evaluation in section 6 provides an assessment of the proposals for training and business opportunities.

Question 11: What are your views on our proposals for undertaking, at our own risk, preliminary works to get the site ready for construction?

10.2.11 Response

Observations on Preliminary Works are set out in section 9 of this technical evaluation.

Question 12: Do you have any other comments about EDF Energy's initial proposals for the development of a new nuclear power station at Hinkley Point?

10.2.12 Response

This technical evaluation sets out the comments on the proposals for development at Hinkley Point C.