

## **APPENDIX A**

### **APPROPRIATE ASSESSMENT**

#### **APPLICATION FOR THE APPROVAL OF THE LOCAL PLANNING AUTHORITY UNDER REGULATIONS 75 & 77 OF THE CONSERVATION OF HABITATS AND SPECIES REGULATIONS 2017**

**APPLICATION REF: 19/10138**

#### **PROPOSAL: DISMANTLING, REMOVAL AND SITE CLEARANCE OF BUILDINGS AT FAWLEY POWER STATION AND REMEDIATION OF THE SITE.**

##### **1. Introduction**

1.1 On 29<sup>th</sup> January 2019, Fawley Waterside Ltd submitted an application to New Forest District Council, seeking the Local Planning Authority's approval under Regulations 75 & 77 of the Conservation of Habitats and Species Regulations.

1.2 Fawley Waterside Ltd are proposing to demolish the existing buildings at Fawley Power Station. On 29<sup>th</sup> January 2019, they submitted a Demolition Prior Notification application for these works to the Local Planning Authority (ref: 19/10131). That application is currently scheduled to be determined by 17<sup>th</sup> May 2019.

1.3 Regulation 75 of the Conservation of Habitats and Species Regulations 2017 indicates that it is a condition of any planning permission granted by a general development order made on or after 20<sup>th</sup> November 2017, that development which:

- a) is likely to have a significant effect on a European site (either alone or in combination with other plans or projects) and
- b) is not directly connected with or necessary to the management of the site

must not be begun until the developer has received written notification of the approval of the Local Planning Authority under Regulation 77 (approval of local planning authority).

1.4 Regulation 77 of the Conservation of Habitats and Species Regulations 2017 indicates that an application to the Local Planning Authority for approval, as mentioned in regulation 75, must give details of the development to be carried out. The Local Planning Authority may only approve the development after having ascertained that it will not adversely affect the integrity of the European Site.

1.5 This application for approval under the Conservation of Habitats Species Regulations 2017 (but which is being treated, more correctly, as an application for approval under Regulation 73 of the Conservation of Habitats and Species Regulations 2010) relates to the demolition of all of the main elements of the power station including the turbine hall, the DA bay, the boiler house, the control building and canteen, and the chimney. The application is accompanied by a report entitled "Information for Appropriate Assessment of Proposed

Demolition of Fawley Power Station, Fawley, Hampshire". The report (v6) was prepared by Jonathan Cox Associates and is dated 16<sup>th</sup> January 2019.

1.6 The application and the associated Prior Notification application are also supported by a number of detailed reports / method statements, comprising:

- Site Environmental Management Plan v10 dated 23d April 2019 by Brown and Mason
- Noise Management Plan v9 dated 15<sup>th</sup> April 2019 by Brown and Mason
- Pollution Prevention Plan v2 dated 23<sup>rd</sup> April 2019 by Brown and Mason
- Ecological Management Plan v3 dated 23<sup>rd</sup> April 2019 by Brown and Mason
- Dust Management Plan v8 dated 15<sup>th</sup> April 2019 by Brown and Mason
- Site Waste Management Plan v7 dated 23<sup>rd</sup> April 2019 by Brown and Mason
- Traffic Management Plan v7 dated 23<sup>rd</sup> April 2019 by Brown and Mason
- Vibration Management Plan v8 dated 23<sup>rd</sup> April 2019 by Brown and Mason
- Provisional Programme 2e dated 15/03/19 by Brown and Mason
- Barge Loading Method Statement rev a dated 14/03/19 by Brown and Mason
- Drawing No C1702/SEMP/004 rev 3 dated 15/04/19
- Outline Explosive Demolition Method Statement rev a dated 12<sup>th</sup> March by Brown and Mason
- Outline Blow Down Manual ref C1701/BDM1/BAM/03/19 by Brown and Mason
- Bat Survey Report dated 04 March 2019 by Davidson-Watts Ecology

## **2. Background to the Current Application**

2.1 In 2014, RWE, the then owners of Fawley Power Station, sought a Screening Opinion from the Local Planning Authority for the demolition of Fawley Power Station under Regulation 61 of the Conservation of Habitats and Species Regulations 2010 (as amended). The Council's Opinion concluded that the proposed demolition would not be likely to have a significant effect on European sites "due to the nature of the development and the mitigation measures proposed". Having reached this conclusion, it was therefore unnecessary to proceed to Stage 2 of the Habitats Regulations Assessment and carry out an Appropriate Assessment

2.2 In April 2018, the Court of Justice for the European Union ruled (in the case of *People over Wind, Peter Sweetman v Coillte Teoranta*) that mitigation measures should not be considered during the Screening Stage of the Habitats Regulations Assessment (HRA). The consequence of this judgement is that the Council's 2014 Screening Opinion is now out of date and its conclusion no longer fit for purpose.

2.3 Because the Council's 2014 Screening Opinion of no adverse effects was reliant upon the implementation of mitigation measures and because such measures can no longer be considered at Stage 1 of the Habitats Regulations Assessment (HRA), it is now necessary to proceed to Stage 2 of the HRA process and carry out an Appropriate Assessment. Only by doing this is it now possible to ascertain whether or not the proposed demolition of Fawley Power Station will adversely affect the integrity of European sites.

2.4 The “Information for Appropriate Assessment” report submitted by Jonathan Cox Associates has been submitted so as to provide the Local Planning Authority, as the Competent Authority, with the necessary information to enable it to undertake this Appropriate Assessment. The “Information for Appropriate Assessment” has been submitted in the form of a ‘shadow’ Appropriate Assessment.

2.5 It is relevant to note that the proposal to demolish Fawley Power Station was the subject of a separate EIA Screening application that was submitted in December 2017 and determined in February 2018 (ref:17/11706). The Local Planning Authority’s conclusion was that the proposed demolition was not EIA development based on the mitigation measures that it was suggested would be secured. The Secretary of State subsequently received a request for a Screening Direction, and in July 2018 they reaffirmed the Council’s Opinion that the proposed demolition is not EIA development within the meaning of the 2017 Town and Country Planning (Environmental Impact Assessment) regulations 2017, (again based on the mitigation being put forward).

### **3. The Plan or Project to be assessed**

3.1 The demolition of Fawley Power Station that is now proposed is illustrated on Brown and Mason’s Drawing No C1702/SEMP/004 rev 3, and a Programme of works is set out on a separate sheet dated 15<sup>th</sup> March 2019. A number of reports, as set out in Paragraph 1.6 above, describe the precise demolition schedule.

3.2 The demolition of the power station has been divided into 3 phases, and this Appropriate Assessment specifically needs to consider the impacts of phases 2 and 3 of the demolition project. This Appropriate Assessment does not need to consider Phase 1, which has already commenced, and which includes various internal stripping out works and demolition of some of the smaller structures on the western side of the power station building that were the subject of a separate Demolition Prior Notification application last year.

3.3 The proposed demolition comprises complete removal of all of the remaining structures of each building, including all subsurface floor levels, equipment and plant concrete plinths, pedestals, and internal walls. However, these activities will not include the removal of the structural floor of the lower sub-basement floor slab or basement walls. All buildings and structural demolition will be carried out as specified and in accordance with the BS6187:2011 Code of Practice.

3.4 The demolition would include 4 explosive demolition events comprising demolition of the Turbine Hall (excluding its front wall), the DA Bay, the Boiler House, and finally the chimney.

3.5 The proposed demolition would result in crushed material (‘clean’ concrete and arising) being stored on the site (within the turbine hall basement) following demolition. Other materials including recyclables would be removed from the site.

### **4. Legal and Planning Context**

4.1 The requirement to undertake HRA of development plans and projects was confirmed by the amendments to the Habitats Regulations published for England and Wales in 2007;

the currently applicable version is the Conservation of Habitats and Species Regulations 2017 (as amended).

4.2 Regulation 63 of the Habitats Regulations requires that any plan or project not directly connected with or necessary for the management of the site and likely to have a significant effect upon a European site should be subject to an Appropriate Assessment by the relevant Competent Authority. In this case, only if the Local Planning Authority considers it beyond reasonable doubt that the project will not adversely affect the integrity of any European site would it then be appropriate to approve the application that has been submitted.

4.3 Considering the likely significant effect of a plan or project at both the screening stage and appropriate assessment stage of the HRA requires the competent authority to consider the effects of the proposal on European sites, both alone and in combination with other plans or projects.

4.4 There are 2 notable recent rulings from the Court of Justice for the European Union (CJEU) that are of particular relevance to this Appropriate Assessment: these are the 'People over Wind' ruling (as referred to in Paragraph 2.2 above) and the 'Holohan' ruling.

4.5 The *People over Wind, Peter Sweetman v Coillte Teoranta* (April 2018) judgement ruled that Article 6(3) of the Habitats Directive should be interpreted as meaning that mitigation measures should be assessed as part of an Appropriate Assessment, and should not be taken into account at the screening stage.

4.6 The *Holohan v An Bord Pleanala* (November 2018) judgement stated that:

*Article 6(3) of Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora must be interpreted as meaning that an 'appropriate assessment' must, on the one hand, catalogue the entirety of habitat types and species for which a site is protected, and, on the other, identify and examine both the implications of the proposed project for the species present on that site, and for which that site has not been listed, and the implications for habitat types and species to be found outside the boundaries of that site, provided that those implications are liable to affect the conservation objectives of the site."*

4.7 Accordingly, this Appropriate Assessment should fully consider the potential for effects on species and habitats, including those not listed as qualifying features, to result in secondary effects upon the qualifying features of European sites, including the potential for complex interactions and dependencies.

4.8 In addition, this assessment should consider the potential for off-site impacts, such as through impacts to functionally linked land, and / or species and habitats located beyond the boundaries of the European site, but which may be important in supporting the ecological processes of the qualifying features.

4.9 However, with respect, to non-qualifying Annex I and Annex II species and habitats, it is deemed that an assessment is not required unless the effect of a plan or project on such species is liable to affect the conservation objectives of the site.

## **5. Stage 1 HRA Screening**

5.1 As noted above, the Council's 2014 HRA Screening Opinion concluded that there would be no adverse impacts on European sites subject to the implementation of specific mitigation measures. The particular sites that were considered at that time were the Solent and Southampton Water Special Protection Area, the Solent and Southampton Water Ramsar site, and the Solent Maritime Special Area of Conservation. Due to the changed legal context, one can no longer at the Stage 1 HRA Screening Stage rely on mitigation measures. As it is not possible to reach a conclusion of no adverse effects on these 3 European sites without mitigation measures, it is necessary in respect of all 3 designations to move on to Stage 2 of the HRA and carry out an Appropriate Assessment. This is considered in further detail below.

5.2 The Council's conclusions in respect of the 2014 HRA Screening application did not consider impacts on 2 European sites that the 'shadow' Appropriate Assessment identifies as requiring further assessment, namely the Solent and Dorset Coast proposed Special Protection Area, and the River Itchen Special Area of Conservation.

### 5.3 The Solent and Dorset Coast proposed Special Protection Area (pSPA)

5.3.1 The 'shadow' Appropriate Assessment notes that the Solent and Dorset Coast pSPA is designated to conserve populations of three species of bird listed on Annex I of the EU Birds Directive, namely; Little Tern, Common Tern and Sandwich Tern. These three species are also a feature of the Solent and Southampton Water SPA so that conservation objectives for this group of species would be the same for both of these sites. The boundary of the pSPA is, however, some 750 metres from the nearest building to be demolished within the former power station, whereas the Solent and Southampton Water SPA boundary is immediately adjacent to the power station boundary.

5.3.2 As such, measures that mitigate impacts on the Solent and Southampton Water SPA to a level that allows a conclusion of no adverse effect on its integrity would also ensure there is no adverse effect on the Solent and Dorset Coast pSPA. Effects of the demolition on the Solent and Dorset Coast pSPA will therefore be considered as part of the assessment of the Solent and Southampton Water SPA and not considered further in this assessment.

### 5.4 The River Itchen Special Area of Conservation

5.4.1 The 'shadow' Appropriate Assessment notes that the EIA Screening report (WSP, 2017) considered potential impacts from demolition on migrant Atlantic salmon passing through Southampton Water. The EIA Screening report assessed the effects of noise and vibration on migratory fish. This included all migratory species using Southampton Water as well as the Atlantic salmon.

5.4.2 The EIA Screening report concluded that given the distance between the demolition activities and migratory fish (within Southampton Water), vibration would not be likely to be a significant effect when percussive plant is in operation. However, should explosives be used to demolish the chimney stack and other concrete structures, the EIA report concluded that these activities may result in levels of vibration that cause disturbance, albeit the duration would be likely to be a singular activity and short-term. The EIA Screening went on to conclude that mitigation measures proposed to reduce noise impacts on migratory birds would also have the effect of preventing disturbance to migratory fish.

5.4.3 As such, because mitigation measures would be needed to offset impacts on migratory fish, it is necessary to consider impacts of the proposed demolition on the River Itchen SAC through this Appropriate Assessment.

## **6. The European Sites that would be affected by the Proposed Development and their Conservation Objectives**

6.1 The 'shadow' HRA by Jonathan Cox Associates identifies 4 European sites that would be likely to be affected by the proposed development on account of their proximity to the application site and/or their conservation features. These sites are:

- a) The Solent and Southampton Water Special Protection Area (SPA)
- b) The Solent and Southampton Water Ramsar Site
- c) The Solent Maritime Special Area of Conservation (SAC)
- d) The River Itchen Special Area of Conservation (SAC)

The Competent Authority agrees that all of these sites need to be considered, as all the sites have the potential for functional ecological connectivity, and therefore for all of the sites impact source-pathway-receptor connectivity potentially occurs.

These 4 sites and their conservation objectives are assessed further below, drawing directly from the 'shadow' HRA by Jonathan Cox Associates.

### **6.2 The Solent & Southampton Water Special Protection Area (SPA) & Ramsar Site**

6.2.1 The Solent and Southampton Water SPA and Ramsar site qualify for classification for 2 distinct groups of birds. In the summer, the site attracts internationally important populations of five species of sea bird listed on Annex 1 of the EU Birds Directive: Common tern, Little tern, Sandwich tern, Roseate tern and Mediterranean gull. These birds nest on shingle beaches and saltmarshes around the Solent shore with breeding colonies confined to a few discrete locations. The tern species return to the Solent in April after wintering on the African coast. In the western Solent, they nest on shingle deposits at the entrance to the Beaulieu River estuary and between Hurst Castle and the Lymington River estuary. Further colonies are found to the east of the Solent in Langstone and Chichester Harbour. In late summer, numbers of terns in the Solent increase as juvenile and returning migrant birds congregate to feed over sand banks and the entrance of estuaries where their prey of small fish are concentrated. The nearest breeding terns to Fawley are those at Needs Ore Point at the entrance of the Beaulieu River estuary.

6.2.2 The second important group of birds are the regularly occurring migratory birds that qualify the SPA under Article 4.2 of the Birds Directive. These reach peak numbers in the Solent during the winter months of December and January. The Solent meets two of the SPA qualifying criteria for this group of birds. It supports internationally important populations of four species of bird; Dark bellied brent geese, Teal, Black-tailed godwit and Ringed plover. The SPA attracts >1% of the UK wintering population of all four of these species. In addition the Solent attracts an assemblage of more than 20,000 wintering waterfowl. At the time of designation, the five year peak mean population was 53,948 individual birds. This assemblage of wintering waterfowl comprises a diversity of wader and wildfowl species. The assemblage is important to the SPA both in terms of the total

number of birds and its diversity of species. Although the selection of the SPA is based on wintering bird populations, it should be noted that the SPA Review states:

*“sites selected for waterbird species on the basis of their occurrence in the breeding, passage or winter periods also provide legal protection for these species when they occur at other times of the year.”*

6.2.3 This is important, as several species for which the Solent qualifies as an SPA are present both in winter and during periods of passage migration and during the breeding season. The spring passage occurs in April and early May whilst post breeding passage migrants such as Black-tailed godwit and Ringed plover may be present in significant numbers from July onwards. Some Ringed plover also remain in the SPA to nest during the breeding season.

6.2.4 Criteria 5 and 6 of the Solent and Southampton Water Ramsar site mirror the two groups of birds for which the SPA qualifies for selection under article 4.2 of the Birds Directive. There is, however, one subtle difference: the qualifying population of Ringed plover for which the SPA has been classified occurs in winter, whilst the Ramsar qualifying criteria is based on the passage migrant population occurring in spring and autumn.

### 6.3 The Solent Maritime Special Area of Conservation (SAC) and Southampton Water Ramsar Site

6.3.1 The Solent Maritime SAC has been designated to conserve examples of 10 habitats of European importance. These can be grouped into four broad habitat types and one ecosystem that may be comprised of a number of Annex 1 and other habitat types. The Ramsar Site designation largely mirrors this range of habitat but also includes the freshwater and terrestrial transitions from these, including coastal grazing marshes, coastal woodlands and reedbeds. The List of habitat types are as follows:

#### 4 Habitat Groups:

##### a) Saltmarshes:

- *Salicornia* Glasswort and other annuals colonising mud and sand
- *Spartina* Cord grass swards (*Spartinion maritimae*)
- Atlantic Salt meadows (*Glauco-Pucconellietalia maritimae*)

##### b) Vegetated Shingle

- Annual vegetation of drift lines
- Perennial vegetation of stony banks; Coastal shingle vegetation outside the reach of waves

##### c) Sand Dunes

- Shifting dunes along the shoreline with *Ammophila arenaria* (“white dunes”); shifting dunes with marram

##### d) Marine

- Sandbanks which are slightly covered by sea water all the time

- Mudflats and sandflats not covered by seawater at low tide; intertidal mudflats and sandflats
- Coastal lagoons

#### Ecosystems

- Estuaries

6.3.2 The SAC is also designated for one species: the Desmoulin's whorl snail *Vertigo moulinsiana*. This small snail is associated with freshwater tall fen habitat and is confined to Chichester Harbour in the extreme east of the SAC.

### 6.4 The River Itchen SAC

6.4.1 The River Itchen SAC is designated for its representation of one Annex 1 habitat type and a total of six species listed on Annex II of the EU Habitats Directive, namely: Southern damselfly *Coenagrion mercuriale*, Freshwater crayfish *Austropotamobius pallipes*, Brook lamprey *Lampetra planeri*, Atlantic salmon *Salmo salar*, Bullhead *Cottus gobio*, and Otter *Lutra lutra*. Of these, only the Atlantic salmon is potentially threatened by the proposed demolition of Fawley Power Station.

6.4.2 The Atlantic salmon is a migratory fish passing through the Solent and Southampton Water both as an adult fish returning to the river and as a juvenile fish or smolt migrating to the sea. Adult salmon migrate up Southampton Water throughout the year. However, peak movements are in autumn and spring/early summer. Movements are stimulated by pulses in freshwater flow following heavy rainfall. The movement of juvenile salmon or smolt back to the estuary is mostly between April and June. The channel of Southampton Water is over 750m from the site of Fawley power station, with intervening intertidal saltmarshes and mudflats. It is unlikely that migratory fish will move up the access channel to the power station dock as this has no attractant freshwater flow.

6.4.3 An additional two Annex II fish species occur within the River Itchen SAC that could potentially be affected. These are the river lamprey *Lampetra fluviatilis* and sea lamprey *Petromyzon marinus*. The river lamprey spends much of its adult life in estuaries, whilst sea lamprey may move through Southampton Water on migration. There is little information on the abundance or distribution of river and sea lamprey in Southampton Water, but it is considered that measures taken to prevent damage or disturbance to Atlantic salmon would also avoid adverse effects on river lamprey and sea lamprey.

### 6.5 Conservation Objectives of the Solent and Southampton Water SPA (criteria 5 & 6)

6.5.1 Natural England has published the following conservation objectives for this site:

*“Subject to natural change; ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring;*

1. *The extent and distribution of the habitats of the qualifying features*
2. *The structure and function of the habitats of the qualifying features*
3. *The supporting processes on which the habitats of the qualifying features rely*



4. *The population of each of the qualifying features, and,*
5. *The distribution of the qualifying features within the site.”*

6.5.2 The ‘shadow’ Appropriate Assessment considers the vulnerability of the SPA with reference to relevant research. The conclusion is drawn that sea level rise and loss of undisturbed habitat are the most significant threats facing the success of Annex 1 nesting birds in the Solent. It is also noted that disturbance to beaches and shingle deposits used by nesting terns can be even more acute in summer than during the winter months. Finally, predation, particularly from mammalian predators, can also pose a significant threat to small vulnerable breeding colonies of seabirds.

#### 6.6 Conservation Objectives of the Solent Maritime SAC and Solent and Southampton Water Ramsar Site (criteria 1 &2)

6.6.1 Natural England has published the following conservation objectives for this site:

*“Subject to natural change, ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;*

1. *The extent and distribution of qualifying natural habitats and habitats of qualifying species*
2. *The structure and function (including typical species) of qualifying natural habitats*
3. *The structure and function of the habitats of qualifying species*
4. *The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely*
5. *The populations of qualifying species, and,*
6. *The distribution of qualifying species within the site.”*

6.6.2 The ‘shadow’ Appropriate Assessment considers the vulnerability of the sites and notes that the SAC and Ramsar site habitats are vulnerable to many of the same impacts that threaten the SPA (as identified in Section 6.5.2 above). It notes that the effects of climate change and sea level rise are predicted to have substantial impacts on the distribution and extent of the coastal and wetland habitats around the Solent. Shoreline habitats are also vulnerable to the combination of trampling and erosion caused by excessive levels of public access. The areas are also vulnerable to changes on water quality: for example, through increased concentrations of nitrates. Reductions in freshwater flows, principally as a result of abstraction for public water supply, also have adverse effects on ecological transitions and movement of migratory fish through estuaries. This is an important feature of the Estuaries habitat type for which the SAC and Ramsar site are designated.

#### 6.7 Conservation Objectives of the River Itchen SAC

6.7.1 Natural England has published the following conservation objectives for this site:

*“Subject to natural change, ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;*

1. *The extent and distribution of qualifying natural habitats and habitats of qualifying species*
2. *The structure and function (including typical species) of qualifying natural habitats*
3. *The structure and function of the habitats of qualifying species*
4. *The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely*
5. *The populations of qualifying species, and,*
6. *The distribution of qualifying species within the site.”*

## **7. Background Information – Bird Use of the Fawley Shoreline**

The Jonathan Cox ‘shadow’ Appropriate Assessment provides details of bird use of the Fawley shoreline, based on surveys that were undertaken during the 2015/16 and 2016/17 winter.

Drawing directly from the ‘shadow’ Appropriate Assessment, the key conclusions of these surveys are as follows:

- The peak count of wildfowl and waders in the five count areas at Fawley was made on 28<sup>th</sup> October 2015 with 1,874 birds representing some 3.6% of the internationally important waterfowl assemblage for which the Solent and Southampton Water SPA/Ramsar site has been classified (Assemblage of 51,361 waterfowl, 5 year peak mean 1991/92-1995/96). The peak mean high water count from the two years of survey was 1,428 birds.
- More birds were present at high water than at low water, with the peak mean low water count being 839.5 birds.
- A couple of the Count areas (1 and 2) comprising the saltmarshes, shingle banks and intertidal mudflats fronting the Power Station were the most important for wintering and passage migrant wildfowl and waders. The most numerous species in these two count areas were Dark-bellied brent goose (high water peak count 751 on 08/12/15), Oystercatcher (peak count 676 on 28/10/2015), Wigeon (peak count 208 on 28/10/15) and Teal (peak count 207 on 30/01/17). The two year peak mean counts in these two Count areas for these four species represent 25%, 48%, 7% and 19% of the Southampton Water winter populations of these species.
- Count areas 1 and 2 are also important in the Southampton Water context for Ringed plover (high water two year mean peak count 27, 19% of Southampton Water), Shelduck (peak mean high water count 52.5, 49% of Southampton Water), Pintail (peak mean high water count 54.5, 71% of Southampton Water) and Black-tailed godwit (peak mean high water count 94.5, 22% of Southampton Water).
- Counts of the Fawley Power station channel found generally low numbers of birds, with a peak count of 168 birds on 19/12/2016. The most numerous species was Dark bellied Brent goose with a peak count of 106 birds (peak mean 2015/16 was 38 and 2016/17 was 45.5). Other more abundant species were Oystercatcher (peak count of 49, annual means of 21 and 31.4) and Wigeon (peak count of 42, annual means of 8 ). The channel was surprisingly poor for Redshank, Black-tailed godwit and Dunlin, with peak counts of 11 Redshank, 56 Black-tailed godwit and no Dunlin. The channel was used occasionally by small numbers of diving birds with peak counts of Great crested grebe (7), Little grebe (1), Great northern diver (1) and Cormorant (4).

## **8. Baseline Conditions**

8.1 As noted in the 'shadow' Appropriate Assessment by Jonathan Cox Associates "Assessing the impact of a plan or project on a European site requires an understanding of the current condition of that site. Sites that are already under environmental stress are less likely to be able to withstand increased pressure than those that are less stressed".

8.2 As noted in the 'shadow' Appropriate Assessment, the former Fawley Power station fronts the Hythe to Calshot Marshes SSSI. Condition assessments for the SSSI are published by Natural England and provide an initial analysis of the condition of the SSSI. Two SSSI condition assessment units front the site of the power station: both are composed of intertidal mudflats and saltmarsh and both are assessed as being in "Unfavourable Recovering Condition".

8.3 With respect to birds using the Solent and Southampton Water SPA and Ramsar site, monitoring data by the British Trust for Ornithology notes that there are red alerts for 3 of the 18 species associated with the SPA (Ringed plover, Dunlin and Redshank) and amber alerts for another 4 (Shelduck, Pintail, Lapwing and Curlew). However, as noted in the 'shadow' Appropriate Assessment, site specific pressures are only likely to be causing declines in Lapwing, with other declines following wider national and regional trends.

## **9. Review of Potential Impacts**

9.1 The 'shadow' Appropriate Assessment by Jonathan Cox Associates identifies 5 potential impacts on European sites arising from the proposed demolition of the Power Station. These are:-

- a) Direct Impacts to Habitats
- b) Potential Indirect Impacts of Drainage
- c) Potential Impacts of Dust
- d) Potential Impact of Noise and Vibration
- e) Potential Impact of Visible Movement

The Competent Authority agrees that these are all impacts that need to be considered, and these impacts are duly assessed below, drawing from the details within the "shadow" Appropriate Assessment.

### **9.2. Direct Impacts to Habitats**

9.2.1 Demolition work is expected to last for a little over 2 years. As noted in the 'shadow' Appropriate Assessment, demolition would be entirely outside the SPA, SAC & Ramsar site boundary, with the nearest part of the building to be demolished being approximately 80 metres away from the SPA boundary. There should therefore be no direct impact on the designated habitats.

### **9.3 Potential Indirect Impacts of Drainage**

9.3.1. The 'shadow' Appropriate Assessment considers that the baseline conditions with respect to drainage, as outlined within the 2014 HRA and separate EIA Screening applications, remain valid, and this is agreed by the Competent Authority. In summary, the Site drains through a traditional pipe drainage network to a series of coastal outfalls into Southampton Water within the intertidal saltmarshes and mudflats of the SPA, SAC and Ramsar site. The existing drainage system includes a number of pollution control

mechanisms (blind sumps, oil interceptors, penstocks and oil sensors) that are remnants from the operation of the Site as a power station.

9.3.2 There are two further outfalls at the southern end of the existing site that take surface water runoff from ditches on the western boundary of the existing site. One of these ditches flows southwards along the western boundary, and receives offsite flows from the west of the existing site at Badminton Farm. The other flows northwards towards the south-west corner of the existing power station site and is assumed to take surface water flows from the existing properties at Calshot.

9.3.3 The previous 2014 HRA Screening application identified that demolition activities could have a potential impact on the European sites through the release and mobilisation of historical contamination. It therefore identified the need for mitigation to offset these impacts.

9.3.4 The 'shadow' Appropriate Assessment notes that no demolition works pursuant to this application will be undertaken until decommissioning operations have been completed, specifically in relation to the removal of all fuel, stored oils and water treatment chemicals from the Site, some of which has already been completed. It is also noted that the Site is currently subject to an Environmental Agency Permit which controls discharge from the Site. All drainage discharges will be made via the on-site interceptors (already installed within the on-site drainage system) with appropriate levels of monitoring and reporting to the EA, which will continue throughout the demolition works.

9.3.5 The 'shadow' Appropriate Assessment notes that, as a precautionary measure, the 2014 HRA Screening application recommended the need to secure mitigation by way of a Pollution Prevention Plan, which should be submitted as part of a wider Site Environmental Management Plan, a conclusion which is considered to remain valid.

9.3.6 In conclusion, there is considered to be a likely significant effect from drainage of the site during demolition. It is therefore necessary to consider whether the mitigation measures that have been submitted with the application in the form of a Pollution Prevention Plan and a Site Environmental Management Plan would offset these effects, having regard to the European and Ramsar Site Conservation Objectives.

#### 9.4 Potential Impacts of Dust

9.4.1 The 'shadow' Appropriate Assessment considers that the baseline conditions for dust are largely unchanged from that presented within the 2014 HRA and separate EIA Screening applications, with the exception of the revocation of the Fawley Air Quality Management Area (AQMA) in 2013, following a series of process improvements at Fawley Refinery and a reduction in sulphur dioxide. In addition, the 'shadow' Appropriate Assessment notes that since 2014, small scale decommissioning works have been in progress within the Site, as well as the introduction of two new temporary uses within the Site, comprising a small scale haulage company and wind turbine trans-shipment, processing and storage. The Competent Authority agrees with this assessment of the baseline conditions.

9.4.2 The previous 2014 Screening Report considered receptors located within 200 metres radius of the site. The shadow 'Appropriate Assessment' notes that more recent

guidance published by the Institute of Air Quality Management (IAQM) advises that consideration should be given to a slightly larger area, notably to ecological receptors within 50 metres of the site boundary and/or 50 metres of the routes used by construction traffic (up to a distance of 500 metres from the site entrance).

9.4.3 The previous 2014 HRA Screening application identified that demolition activities could potentially lead to the degradation of designated ecological sites as a result of dust deposition associated with mechanical and explosive demolition, concrete crushing activities, material stock piling and on-site haulage activities. This is considered to remain relevant. However, the 'shadow' Appropriate Assessment has now identified a potential additional dust impact on sensitive receptors, which is a potential increase in pollutant concentrations (Nitrogen Dioxide (NO<sub>2</sub>)) and Particulate Matter (PM<sub>10</sub> and PM<sub>2.5</sub>) from exhaust emissions, arising from construction traffic and plant. This additional potential impact is agreed by the 'Competent Authority'. There are not considered to be any other significant dust effects. However, there is evidently a need for mitigation to offset the 2 potential adverse effects on European sites that have been identified.

9.4.5 The 'shadow' Appropriate Assessment notes that the 2014 Screening application proposed mitigation by way of a Dust Management Plan, to be prepared and implemented throughout the demolition work, based on industry best practice and relevant guidance. The 'shadow' Appropriate Assessment also recommends that specific mitigation measures should be incorporated into a Site Environmental Management Plan, in relation to plant, equipment and construction traffic.

9.4.6 In conclusion, there is considered to be a likely significant effect from dust emissions during demolition. It is therefore necessary to consider whether the mitigation measures that have been submitted with the application in the form of a Dust Management Plan and a Site Environmental Management Plan would offset these effects, having regard to the European and Ramsar Site Conservation Objectives.

## 9.5 Potential Impacts of Noise and Vibration

9.5.1 The 'shadow' Appropriate Assessment considers that the baseline conditions identified within the 2014 HRA and separate EIA Screening are largely unchanged, with principal noise sources being noise generated from road traffic, shipping movements within Southampton Water, the operation of the substations (400kV and 132KV / two super-grid transformers) and nearby industrial activities (including Fawley Oil Refinery).

9.5.2 However, as the 'shadow' Appropriate Assessment notes, a number of new activities are now taking place that were not taking place in 2014. This includes the internal stripping of the Turbine Hall, and the use of the site by temporary tenants, by far the most significant of whom is MHI Vestas, who are operating a wind turbine trans-shipment, processing (painting) and storage facility. Noise generated by the MHI Vestas facility was modelled as part of their planning application for temporary planning permission. It predicted a worse-case scenario maximum noise at the SPA boundary of 64.9 dBA. This was predicted at the north-eastern end of the new MHI Vestas facility near to the south-east corner of the electricity sub-station building.

9.5.3 The 'shadow' Appropriate Assessment recognises the significant effects that were identified as part of the 2014 HRA Screening process, which are considered to remain

valid. These effects are, firstly, disturbance to SPA and Ramsar site birds from noise generated by on-site demolition and construction activities and associated temporary traffic; and secondly, disturbance to SPA and Ramsar site birds from vibration generated by on-site demolition and construction activities.

9.5.4 As is set out in the 'shadow' Appropriate Assessment, demolition noise will involve HGV movements, diesel engine plant, percussive noise from breaking concrete and cutting steel, and isolated events of explosive demolition noise.

9.5.5 The level at which disturbance to birds in the SPA and Ramsar site is likely to occur is considered to be 69dB(A). As part of the previous 2014 HRA and EIA Screening work, the potential impacts of noise were looked at by a firm of acoustic consultants. Subject to normal control measures, noise levels from demolition of most of the power station should not exceed the threshold where disturbance would be expected. However, with respect to the demolition of the control room (which is the nearest building to the SPA), there would be the potential, without any screening, for noise levels to reach 73 dB(A) at the nearest point of the SPA. However, as the 'shadow' Appropriate Assessment notes, the area where noise levels might be above 70dB(A) would be mainly an area of coastal grassland that is not used by the SPA birds. The 'shadow' SPA suggests that either through screening and/or the timing of the most noisy demolition works outside of the most sensitive overwintering period that it would be possible to mitigate noise impacts. These mitigation details should be set out in a Noise Mitigation Plan.

9.5.6 The 4 explosive demolition events that are proposed would produce high peak noise levels of a short duration (in excess of 69dB(A)). Because of the short duration of these explosive demolition events, the 'shadow' SPA suggests that such noise is unlikely to have any significant impact, but that the planning and timing of these events should be agreed to avoid any cumulative impact.

9.5.7 The 'shadow' Appropriate Assessment suggests that "*vibration is not considered likely to have an impact on SPA and Ramsar site bird populations, given the separation between the buildings and the European and Ramsar site boundary*". However, in the light of the previous 2014 HRA Screening report, it is suggested that a precautionary approach is now taken to vibration.

9.5.8 In conclusion, there is considered to be a likely significant effect from noise and vibration during demolition. It is therefore necessary to consider whether the mitigation and avoidance measures that have been submitted with the application in the form of a Noise Management Plan, and a Vibration Management Plan would offset these effects, having regard to the European and Ramsar Site Conservation Objectives.

## 9.6 Potential Impact of Visible Movement

9.6.1 The baseline conditions relied upon in the 'shadow' Appropriate Assessment recognise the historic use of the site as a power station and the changes that have taken place since the power station was decommissioned. These have included the temporary use of the site as a film set, and more recently the temporary uses of parts of the site for the painting and storage of wind turbines, and for mineral workings. These uses result in the regular movement of vehicles and people between the power station buildings and the SPA and Ramsar site boundary. There is also a public footpath alongside the power

station's coastal edge. The 'shadow' Appropriate Assessment notes that from the bird surveys that have been undertaken, there is some evidence that unpredictable and unusual levels of activity can cause disturbance to wintering and migratory birds.

9.6.2 The 'shadow' Appropriate Assessment indicates that demolition activity will involve HGV movements, but these will predominantly be at the rear of the station which is screened from the SPA. Nonetheless, it is recognised that additional visible movements on the site could potentially affect the European sites, and that this therefore needs mitigation through the agreement of a Zoning and Layout Plan (as part of an overall Demolition Management Plan), identifying car parking, HGV routes and handling areas.

9.6.3 The 'shadow' Appropriate Assessment indicates that it is likely that barges or coasters will be the main means by which scrap metal leaves the site. Boats can only navigate the channel at high tide, when the majority of birds will be displaced from the intertidal zones. Boats will be a similar size or smaller than those previously used to supply the power station with fuel oil. The channel is regularly used by the 'Bladerunner', a boat specifically designed to transport the wind turbine blades to and from the site. Studies of boat movements at Fawley and elsewhere in the Solent have shown that providing speed is limited they cause no significant disturbance to intertidal feeding waterfowl.

9.6.4 The 'shadow' Appropriate Assessment notes that demolition work on the north-eastern side of the power station and activity at a high level, including handling reflective roof and glazing panels, has the potential to cause visual disturbance to birds within the SPA during the sensitive overwintering period, particularly between November and February. As the 'shadow' Appropriate Assessment identifies, an avoidance strategy has been developed in order to ensure that most external demolition activity does not occur in this area of the power station during this overwintering period. In this way, potential disturbance to SPA and Ramsar site bird populations will be minimised. However, should any low level activity be required on the site of the Control Room during the more sensitive overwintering period, this is considered unlikely to cause any significant disturbance to wintering SPA birds as the activity would tend to be slow moving predictable and constant; as the distance between the demolition site and the SPA would be in excess of likely disturbance distances (based on a previous study); and as a belt of coastal grassland and scrub provides an important visual screen between the power station and the intertidal flats used by the SPA birds.

9.6.5 In conclusion, there is considered to be a likely significant effect from visible movement during demolition. It is therefore necessary to consider whether the mitigation and avoidance measures that have been submitted with the application in the form of a Demolition Management Plan and a Site Environmental Management Plan would offset these effects, having regard to the European and Ramsar Site Conservation Objectives.

## **10. In-Combination Assessment**

10.1 As noted in the 'shadow' Appropriate Assessment, it is a requirement that plans and projects assessed under the Habitats Regulations are considered both alone and, where necessary, in combination with other plans or projects. This is done to take account of cumulative or additive effects. However, to have a combined effect it is necessary for each plan or project to have a measurable impact on the European sites concerned.

10.2 The HRA Screening assessment undertaken in 2014 considered in-combination effects of the proposed demolition in some detail. It concluded that the implementation of an avoidance strategy would mean that activities with potential to have impacts on the SPA and Ramsar site would not be carried out during the bird wintering period, so avoiding the potential for visual disturbance. Noise from general demolition was assessed and was not expected to exceed thresholds at which disturbance would be expected. As a consequence, it was concluded that there were no impacts arising from the demolition to be considered in combination.

10.3 The 'shadow' Appropriate Assessment has considered 4 other projects for in combination effects. These are:

- a) The National Grid substations
- b) Fawley Quarry
- c) Maintenance Dredging within Southampton Water
- d) The MHI Vestas wind turbine painting and storage facility

These will now be looked at in turn.

#### 10.4 The National Grid Substations

10.4.1 The National Grid currently lease 8.7ha of land within the boundary of Fawley Power Station, which is occupied by two substations (400kV and 132kV) and two supergrid transformers, as well as associated infrastructure. The operations here would be concurrent with the proposed demolition.

10.4.2 However, as the 'shadow' Appropriate Assessment notes, the survey work which informed the 2014 screening applications, and the subsequent data which has been used to inform this Appropriate Assessment was undertaken / produced with the substation in place. Therefore, the National Grid substation forms part of the baseline scenario, and any combined effects of this project and the proposed demolition have already been considered. Accordingly, there is not considered any need to further consider in-combination effects associated with this project.

#### 10.5 Fawley Quarry

10.5.1 Fawley Quarry has been operational for many years, and there remains a consent to extract sand and gravel on this site up until 2026. As such, extraction activities and associated transport of materials on this site would be concurrent with the proposed demolition.

10.5.2 Due to the proximity of Fawley Quarry to the proposed demolition site, there is a similar geographical extent to the 2 projects, and common sensitive receptors. However, as the 'shadow' Appropriate Assessment notes, the survey work which informed the 2014 screening applications, and the subsequent data which has been used to inform this Appropriate Assessment was undertaken / produced during the ongoing operations at Fawley Quarry. Therefore, Fawley Quarry forms part of the baseline scenario, and any combined effects of this project and the proposed demolition have already been



considered. Accordingly, there is no requirement to further consider in-combination effects associated with this project.

## 10.6 Maintenance Dredging within Southampton Water

10.6.1 The 'shadow' Appropriate Assessment advises that Fawley Waterside Limited (FWL) undertook maintenance dredging of the marine channel from the Fawley Power Station Dock to Southampton Water in February 2017. Dredging was completed in line with marine license L/2017/00024/1, held by FWL. The marine license was valid up to the 27 February 2017, and as such, no further dredging activities can now be undertaken without an additional license application.

10.6.2 Therefore, it is considered that channel maintenance dredging activities do not share a common construction or operational phase with the proposed demolition. Accordingly, there is no requirement to further consider in-combination effects associated with this project.

## 10.7 The MHI Vestas wind turbine painting and storage facility

10.7.1 MHI Vestas have been granted a 10 year temporary planning permission, expiring on 31st December 2027. The permission is for 2 steel portal framed industrial buildings (Use Class B2); a mobile portable cabin, and use of land for the storage of wind turbine blades (B8). The development is located within the boundary of the former power station and, therefore, shares a common geographical extent. As such, the activities associated with this use would be concurrent with the proposed demolition activity.

10.7.2 The Council's 2018 EIA Screening assessment for the demolition that is now proposed considered that there was a potential for combined effects of the MHI Vestas operation and the demolition of the power station. 2 potential in-combination effects were identified. These were:

- Disturbance to bird populations associated with nearby SPA and Ramsar sites and functionally linked land.
- Increased surface water flow to controlled waters within the nearby SPA, SAC and Ramsar sites.

10.7.3 Looking at the first of these 2 in-combination effects, the common receptor under consideration is important species (birds) associated with the adjacent designated ecological sites. Bird species are considered to be tolerant to a level of noise disturbance (considered to be 69.9dB), above which there may be disturbance and hence adverse effects on wintering birds (based on information provided by Natural England).

10.7.4 As noted in the 'shadow' Appropriate Assessment, the operation of the MHI Vestas facility involves noise generating activities, including; loading/unloading of barges; movement of blades via transporters within the Site; and plant and machines associated with on-site process, including washing and painting, which may occur at the same time as noise generating activities associated with the proposed demolition (mechanical and/or explosive demolition).

10.7.5 Taking the worse-case scenario, noise levels modelled for the MHI Vestas application would give a maximum of 64.9dB(A) at the SPA boundary. In the absence of

any acoustic screening from the demolition of the Control Room, the Spectrum Acoustic modelling predicts a maximum noise level of 73dB(A) at the same nearest point of the SPA boundary. Combining these two predicted noise levels gives a level of 64.9dB(A) plus 73dB(A) Model E1 = 73.625dB(A). This would exceed the noise disturbance threshold for the SPA and Ramsar site. However, this situation would be avoided by timing of demolition of the Control Room to avoid the sensitive wintering bird period of November to February or, mitigated by providing acoustic screening if noise generating work needed to be undertaken at this time of year.

10.7.6 It is noted that on-site noise level monitoring will also be undertaken to ensure noise levels remain below the target threshold and action taken should these deviate from those predicted by the modelling.

10.7.7 As noted in the 'shadow' Appropriate Assessment, the proposed demolition and the MHI Vestas facility will, in combination, lead to an increase in physical movements within the Site, visible from the adjacent designated ecological sites and functionally linked land. Visual disturbance can result in bird flight, increased energetic demand and potentially abandonment of habitat.

10.7.8 Movement at the MHI Vestas facility, associated with the transportation and loading / unloading of turbine blades, as well as staff movements, may occur at the same time as the operating equipment and staff required for the proposed demolition, including the movement of barges. As is set out in the 'shadow' Appropriate Assessment, visual disturbance associated with barge movements is principally linked to the proximity of barges to protected species, where the tolerance of species to such disturbance is linked to distance (i.e. greater tolerance with increased distance). The visual disturbance associated with the MHI Vestas facility is considered to be limited because movement of turbine blades is undertaken with precision (i.e. at slow speeds) due to the scale and movability of the blades. In addition, the movement of barges associated with this use is typically no more than 10 return trips a week.

10.7.9 Some of the waste arisings from the proposed demolition are proposed to be removed by barges. There would therefore be a potential in-combination effect in terms of barge movements. To mitigate any potential in-combination impacts, a Barge Loading Method Statement is proposed which would include measures to ensure that barge movements are scheduled so that multiple movements would not take place at the same time or exceed (in combination) 21 return trips a week.

10.7.10 As noted in the 'shadow' Appropriate Assessment, the operation of the MHI Vestas project requires a low number of operatives (33), which is considered to be a minimal addition, particularly considering existing activities on site. The proposed demolition is also likely to have a low number of staff (50).

10.7.11 The 'shadow' Appropriate Assessment concludes that providing boat movements are undertaken in line with the above measures, no further mitigation over and above that required at the individual project level is considered necessary unless the barge movements were to exceed 21 return trips a week. This conclusion is accepted by the Competent Authority.

10.7.12 With respect to increased surface water flow to controlled waters, the common receptor under consideration is Southampton Water, given that any outfall from the proposed demolition and MHI Vestas facility will ultimately be into Southampton Water.

10.7.13 The 'shadow' Appropriate Assessment notes that, as was determined at the project level, the MHI Vestas facility would result in an increased catchment area in terms of the area draining into Southampton Water, whilst the washing of blades may result in an increased volume of water draining to the receptor. However, the MHI Vestas facility minimises the requirement for drainage of surface water to the receptor as far as possible. No sources of contamination are considered likely within the open storage areas, and the volume of water used would be limited. Within the project level drainage assessment, it is noted that an environmental permit will be necessary for the discharge of runoff to the receptor, which would minimise any negative physical impacts to the receptor.

10.7.14 As the 'shadow' Appropriate Assessment recognises, due to the nature of the works associated with the proposed demolition, additional drainage requirements would be controlled to acceptable levels that can be accommodated by the receptor (Southampton Water). The 'shadow' Appropriate Assessment concludes that assuming the project level mitigation is implemented (and monitored where necessary) in-combination environmental effects on controlled waters are unlikely. This conclusion is accepted by the Competent Authority.

#### Additional in-combination effects

10.8 The 'shadow' Appropriate Assessment did not initially consider in-combination effects arising from a 5 year temporary planning permission for the use of land on the southern side of the power station for the open storage of gravel. However, an addendum has subsequently been submitted.

10.8.1 The submitted addendum notes that there is potential for in-combination effects of noise from the operation of the gravel storage area and the demolition of the power station. However, noise generated by the gravel storage operation will be monitored at the Special Protection Area boundary to ensure levels remain below target levels. As noted elsewhere, the most significant noise generating elements of the power station demolition will be undertaken outside of the sensitive overwintering bird period. With these mitigation measures in place, so it will be possible to ensure that there are no combined effects of noise that would adversely affect the Special Protection Area and Ramsar site bird populations.

10.8.2 The submitted addendum also notes that there is potential for combined effects of boat movements along the Fawley access channel from the demolition of the power station, MHI Vestas blade movements and the gravel storage operation. However, through the mitigations measures that are proposed that would limit the number of boat movements, limit boat speeds, and confine boat movements to the defined dredged channel, it would be possible to ensure that there are no combined effects from boat movements that would adversely affect the Special Protection Area and Ramsar bird populations.

### **11. Schedule of Proposed Mitigation**

11.1 The Schedule of Proposed Mitigation includes the following:

- Site Environmental Management Plan (SEMP)
- Demolition Phasing Plan & Provisional Programme
- Site Layout Plan
- Explosive Demolition Method Statement & Blowdown Manual
- Ecological Management Plan
- Protected Species Licences (Bats)
- Noise Management Plan
- Vibration Management Plan
- Noise Monitoring
- Dust Management Plan
- Barge Loading Method Statement
- Site Waste Management Plan
- Pollution Prevention Plan
- Traffic Management Plan

## 11.2. Site Environmental Management Plan

11.2.1 The Site Environment Management Plan (SEMP) that has been prepared is a detailed document that sets out the proposed working procedures, management structure and control measures that will be put into place in order to manage asbestos removal, demolition and site clearance of the power station buildings. The SEMP incorporates detailed environmental management measures in respect of noise, dust management (air quality), vibration, water, waste, traffic, human health, visual impact, ecology, lighting and flood risk.

## 11.3 Demolition Phasing Plan

11.3.1 The demolition Phasing Plan and proposed demolition programme sets out the proposed demolition timescales to ensure those works with the greatest potential to impact on the SPA are timed so as to avoid the sensitive overwintering period between November and February (4 months).

## 11.4 Site Layout Plan

The Site Layout Plan incorporates details of the location of the fuel and oil storage area, the welfare area and the concrete crushing / stockpile area. These facilities would be either sited in areas furthest away from the SPA, or in the case of the crushing / stockpile area within the turbine hall basement where it would be screened from the SPA.

## 11.5 Explosive Demolition Method Statement & Blowdown Manual

11.5.1 The Outline Explosive Demolition Method Statement and the Outline Blowdown Manual provide a framework methodology for the 4 planned explosive demolition events, which would all be timed to take place outside the sensitive overwintering period (November to February). These single large noise events would result in a single disturbance that Natural England have confirmed can be considered 'de minimis' in terms of any noise impact on bird populations.

11.5.2 Each explosive demolition event will need to be the subject of a more detailed method statement (which cannot yet be determined), with the relevant details provided to

the Local Planning Authority beforehand. These more detailed method statements would take place within the parameters set by the Outline Explosive Demolition Method Statement and the Outline Blow Down Manual, so that there can be the necessary confidence that potential impacts on European sites will be appropriately mitigated.

#### 11.6 Ecological Management Plan

11.6.1 The Ecological Management Plan that has been submitted incorporates a number of mitigation measures in order to manage the ecological aspects of asbestos removal, demolition of the power station buildings and site clearance. As well as dealing with the more detailed impacts set out in other reports, the Ecological Management Plan proposes measures to ensure that there are ongoing wildlife inspections of the site by a competent person.

#### 11.7 Protected Species Licences (Bats)

11.7.1 A Bat Survey Report assessed the power station in 2018 for bat presence and found the presence of roosting common pipistrelle bats. Licences would be required in advance of the proposed demolition in agreement with Natural England. Mitigation for the loss of roosting bats is suggested.

#### 11.8 Noise Management Plan

11.8.1 The Noise Management Plan sets out the noise control measures that will be put into place during the demolition project. The Noise Management Plan recognises that noise should not exceed 69.9dB(LAeq) at the nearest point of the SPA if adverse noise impacts on the SPA are to be avoided. Rather than mitigation of potential noise impacts through screening, the Noise Management Plan seeks to avoid such adverse impacts altogether by programming the explosive demolition events and the demolition of those parts of the power station that are closest to the SPA outside of the sensitive November to February overwintering period.

11.8.2 The Noise Management Plan incorporates a monitoring plan for an identified zone that forms the nearest section of the SPA to the power station buildings. Within this zone, monitoring would be carried out for 60 minutes each day, so as to ensure that the Action Level of not exceeding 69.9dB(LAeq) is adhered to.

#### 11.9 Vibration Management Plan

11.9.1 The Vibration Management Plan sets out the procedures, management structure and control measures that will be put in place, in order to manage vibration impacts during the proposed demolition project. The Vibration Management Plan proposes that the potential effects of vibration on adjacent European sites are monitored at the nearest point of the SPA, with set actions then proposed to be put into place if vibration exceeds specified vibration levels. Such monitoring and action measures are designed to ensure that vibration levels during demolition remain within best practice guidelines.

#### 11.10 Dust Management Plan

11.10.1 The Dust Management Plan sets out the procedures, management structure and control measures that will be put into place to manage dust emissions from the proposed

demolition. The Dust Management Plan has been prepared, utilising the IAQM's Guidance on Monitoring in the Vicinity of Demolition and Construction Sites – October 2018 (version 1.1)

11.10.2 Although, the Dust Management Plan assesses the impact of dust on the SPA as being low, by way of mitigation it proposes that there be continuous monthly monitoring within the nearest parts of the SPA to ensure that dust levels within the SPA do not exceed a level that would give rise to adverse effects.

#### 11.11 Barge Loading Method Statement

11.11.1 The Barge Loading Method Statement indicates that in so far as the demolition of the power station is concerned, that there would be only 1 barge load a week associated with the transport of heavy scrap metal, which should not result in the combined number of barge movements to the site exceeding 21 return movements per week. The Barge Loading Method Statement includes procedures for ensuring the safe loading of barges.

#### 11.12 Site Waste Management Plan

11.12.1 The Site Waste Management Plan provides a framework for the management of waste throughout the demolition project so as to ensure compliance with legislative requirements. It includes measures for recycling waste, where appropriate.

#### 11.13 Pollution Prevention Plan

11.13.1 The Pollution Prevention Plan sets out the procedures, management structure and control measures that will be put into place in order to manage potential pollution sources, so as to prevent pollution and so as to ensure that demolition works do not affect local controlled bodies of water, drains or watercourses. The report includes a number of detailed control and monitoring measures.

#### 11.14 Traffic Management Plan

11.14.1 The Traffic Management Plan sets out the procedures that will be put in place so as to manage traffic movements to and from the Power Station. Traffic would be routed so as to be primarily on the side of the site furthest away from the SPA boundary, thereby ensuring that any potential disturbance effects would be avoided.

#### 11.15 Unilateral Undertaking

11.15.1 A Unilateral Undertaking has been submitted, in which the owner covenants that it will adhere at all times to the methodology set out in all of the above cited reports, and that it will implement in full all of the mitigation and avoidance measures set out within these reports. Furthermore, within the Unilateral Undertaking, the owner covenants to appoint an Environmental Clerk of Works who will be responsible for overseeing and monitoring the implementation of the various mitigation measures, and who will have the authority to require demolition to cease if a risk of a significant effect to a European site were to be identified. It is considered that this Unilateral Undertaking gives the Competent Authority the necessary level of confidence that the proposed methodology will be adhered to, that the mitigation measures will be achievable and effective, and that there will be the necessary safeguards should any risks be subsequently identified.

## **12. Assessment of Likely Impacts against Conservation Objectives**

12.1 In his 'shadow' Appropriate Assessment, Jonathan Cox Associates has produced a set of tables (3 in total), which considers the 5 main potential adverse effects (drainage, dust, noise & vibration, visible movement, and in combination effects) against the particular conservation objectives of the 4 European sites that have the potential to be adversely affected by the proposed demolition. These 3 tables are attached as Appendix 1 to this Appropriate Assessment. In all cases, it is concluded that there would either be no impact, or that the impact would be mitigated, avoided or offset as a result of the mitigation measures that have been proposed within the various reports accompanying the application. The Competent Authority fully endorses the assessment of likely impacts as set out in these tables.

12.2 As such, it is the Competent Authority's conclusion that the implementation of the proposed mitigation measures, as set out in the reports discussed in Section 11 above, would ensure that the proposed demolition project would have no adverse effects on the Conservation Objectives of the Solent and Southampton Water SPA and Ramsar Site, the Solent Maritime SAC and the River Itchen SAC.

## **13. Assessment of Effects on Integrity**

13.1 The 'shadow' Appropriate Assessment highlights that Regulation 63 of the Habitats Regulations requires not only an assessment be made against the Conservation Objectives of the European sites concerned, but also that a conclusion of no adverse effect on the integrity of the sites concerned be reached.

13.2 In considering impacts on Site Integrity, advice from English Nature (as they were known when the advice was issued) suggests that the Competent Authority should ask itself 5 questions which are:

Has the Appropriate Assessment shown:

1. That the area of Annex 1 habitats (or composite features) will not be reduced.
2. That there will be no direct effect on the population of the species for which the site was designated or classified.
3. That there will be no indirect effects on the populations of species for which the site was designated or classified due to loss or degradation of their habitat (quantity / quality)
4. That there will be no changes to the composition of the habitats for which the site was designated (e.g. a reduction in species structure, abundance or diversity that comprises the habitat over time).
5. That there will be no interruption or degradation of the physical, chemical or biological processes that support habitats and species for which the site was designated or classified.

13.3 The Guidance goes on to suggest that if the answer to all of these questions is 'yes', then it would be reasonable to conclude that there would not be an adverse effect on integrity.

13.4 Accordingly, the Competent Authority has reviewed the answers to these 5 questions, and it considers that for all 5 questions the answer is indeed yes.

13.5 Given that all of the integrity questions can be answered in the affirmative, it is therefore concluded that, taken as a whole, including all of the identified mitigation measures, the proposed project to demolish Fawley Power Station would not have an adverse effect upon the integrity of the following European sites:

- Solent and Southampton Water SPA
- Solent and Southampton Water Ramsar Site
- Solent Maritime SAC
- River Itchen SAC

#### **14. Consultation with Natural England**

14.1 Natural England considered the 'shadow' Appropriate Assessment in their consultation response dated 21<sup>st</sup> February 2019. Subject to detailed comments, Natural England's conclusion is that the mitigation measures proposed will mitigate for all identified adverse effects that could potentially occur as a result of the proposal.

#### **15. Overall Conclusion**

15.1 The Competent Authority's overall conclusion is that the proposed project to demolish Fawley Power Station and to remediate the site would not result in adverse effects on the integrity of European sites, either alone or in-combination with other plans and projects, having regard to the suite of mitigation measures that would be implemented, as set out in the detailed application reports and as secured in the Unilateral Undertaking accompanying the Demolition Prior Notification application.



## APPENDIX 1

### 1.1 Assessment Against Conservation Objectives for the Solent and Southampton Water SPA and Ramsar site

Subject to natural change; ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring;

	Drainage	Dust	Noise & Vibration	Movement	In combination
<b>The extent and distribution of the habitats of the qualifying features.</b>	No Impact	No Impact	No Impact	No Impact	No Impact
<b>The structure and function of the habitats of the qualifying features</b>	Function of habitats will be maintained by mitigation measures defined in Pollution Prevention Plan (PPP)	Function of habitats will be maintained by mitigation measures defined in the Dust Management Plan and Site Environmental Management Plan (SEMP)	Function of habitats will be maintained by mitigation measures defined in the Noise & Vibration Management Plan	Function of habitats will be maintained by mitigation measures defined in the Demolition Management Plan	Potential cumulative impacts with MHI Vestas mitigated as defined in the Schedule of Proposed Mitigation
<b>The supporting processes on which the habitats of the qualifying features rely</b>	No Impact	No Impact	No Impact	No Impact	No Impact
<b>The population of each of the qualifying</b>	Bird populations not affected as habitat	Bird populations not affected as habitat function maintained by	Bird populations not affected as habitat	Bird populations not affected as habitat	Potential cumulative impacts with MHI Vestas

<b>features</b>	function maintained by measures proposed in PPP	measures proposed in Dust Management Plan and SEMP	function maintained by measures proposed in the Noise & Vibration Management Plan	function maintained by measures proposed in the Demolition Management Plan	mitigated as defined in the Schedule of Proposed Mitigation
<b>The distribution of the qualifying features within the site</b>	Bird distribution not be affected as habitat function is maintained by measures proposed in PPP	Bird distribution not affected as habitat function is maintained by measures proposed in Dust Management Plan and SEMP	Bird distribution not affected as habitat function is maintained by measures proposed in the Noise & Vibration Management Plan	Bird distribution not affected as habitat function is maintained by measures proposed in the Demoliton Management Plan	Potential cumulative impacts with MHI Vestas mitigated as defined in the Schedule of Proposed Mitigation

## 1.2 Assessment Against Conservation Objectives for the Solent Maritime SAC and Solent and Southampton Water Ramsar site (criteria 1 and 2)

Subject to natural change, ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;

	<b>Drainage</b>	<b>Dust</b>	<b>Noise &amp; Vibration</b>	<b>Movement</b>	<b>In combination</b>
<b>The extent and distribution of the habitats of the qualifying features</b>	No Impact	No Impact	No Impact	No Impact	No Impact
<b>The structure and function of the</b>	Structure & Function of Annex I	Structure & Function of Annex I habitats	Structure & Function of Annex I	Structure & Function of Annex I	Potential cumulative impacts with

<b>habitats of the qualifying features</b>	habitats will be maintained by mitigation measures defined in Pollution Prevention Plan (PPP)	will be maintained by mitigation measures defined in the Dust Management Plan and Site Environmental Management Plan (SEMP)	habitats will be maintained by mitigation measures defined in the Noise & Vibration Management Plan	habitats will be maintained by mitigation measures defined in the Demolition Management Plan	MHI Vestas mitigated as defined in the Schedule of Proposed Mitigation
<b>The supporting processes on which the habitats of the qualifying features rely</b>	No Impact	No Impact	No Impact	No Impact	No Impact
<b>The population of each of the qualifying features</b>	No impact on population of qualifying features	No impact on population of qualifying features	No impact on population of qualifying features	No impact on population of qualifying features	No impact on population of qualifying features
<b>The distribution of the qualifying features within the site</b>	Distribution of Annex I habitats will not be affected by Drainage	Distribution of Annex I habitats will not be affected by Dust	Distribution of Annex I habitats will not be affected by noise or vibration	Distribution of Annex I habitats will not be affected by movement	Distribution of Annex I habitats will not be affected by combined or cumulative effects

### 1.3 Assessment Against Conservation Objectives for the River Itchen SAC

Subject to natural change, ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;

	Drainage	Dust	Noise & Vibration	Movement	In combination
<b>The extent and distribution of the habitats of the qualifying features</b>	No Impact	No Impact	No Impact	No Impact	No Impact
<b>The structure and function of the habitats of the qualifying features</b>	No Impact	No Impact	No Impact	No Impact	No Impact
<b>The supporting processes on which the habitats of the qualifying features rely</b>	No Impact	No Impact	No Impact	No Impact	No Impact
<b>The population of each of the qualifying features</b>	No Impact	No Impact	Potential impact on population of Atlantic salmon mitigated through Noise & Vibration Management Plan	No Impact	Potential impact on population of Atlantic salmon mitigated through Pollution Prevention

**The  
distribution  
of the  
qualifying  
features  
within the  
site**

Potential  
impact on  
distribution of  
Atlantic salmon  
removed by  
implementation  
of Pollution  
Prevention Plan  
(PPP)

No Impact

Potential  
impact on  
distribution of  
Atlantic salmon  
removed by  
implementation  
of Noise &  
Vibration  
Management  
Plan

No Impact

Plan (PPP)

No Impact