

Decision document variation

We have decided to grant the variation for Hinkley Point C Power Station operated by NNB Generation Company (HPC) Limited.

The variation number is EPR/ZP3238FH/V004.

The permit was issued on 06/10/2026

The permit, granted in 2013, allowed the operation of 12 back-up diesel generators (Essential Diesel Generators (EDGs) and Ultimate Diesel Generators (UDGs), previously referred to as Station Blackout Diesel Generators). Since the permit was issued, several design changes have been made to the permitted combustion plant. The EDGs and UDGs differ from those assessed in the original permit application and have therefore been updated as part of this variation. The variation also adds 37 smaller back-up generators.

In addition, this variation introduces a limit of no more than 500 operating hours per year for all existing and additional generators. Although the permitted operating hours have been reduced, the total permitted thermal input of the combustion plant will increase to approximately 243 MWth, an increase of approximately 67 MWth compared with the previously permitted total.

The generators are safety-classified standby equipment and will only be operated in the event of a power failure, for maintenance purposes, during periodic testing and commissioning. The changes introduced by this variation are designed to improve the resilience of the site in the event of a loss of off-site power (LOOP).

We consider that, in reaching that decision, we have taken into account all relevant considerations and legal requirements and that the permit will ensure that the appropriate level of environmental protection is provided.

Purpose of this document

This decision document provides a record of the decision-making process. It

- highlights key issues in the determination
- summarises the decision making process in the decision considerations section to show how the main relevant factors have been taken into account
- shows how we have considered the consultation responses

Unless the decision document specifies otherwise, we have accepted the applicant's proposals.

Read the permitting decisions in conjunction with the environmental permit and the variation notice.

Key issues of the decision

Best Available Techniques (BAT) assessment

The installation will be designed, constructed and operated using Best Available Techniques (BAT). The existing Hinkley Point C permit (EPR/ZP3238FH) already covers the operation of the Essential Diesel Generators (EDGs) and Ultimate Diesel Generators (UDGs, previously referred to as Station Blackout Diesel Generators). This variation introduces additional generating capacity to ensure that critical infrastructure across the Site can continue to operate during a loss of off-site power (LOOP) event.

There are no BAT Conclusions specifically applicable to the activities covered by this variation (IED Chapter II combustion activity). We have therefore assessed the proposed techniques against relevant Environment Agency guidance for standby diesel generators and, where appropriate, considered general BAT principles set out in guidance for combustion activities including: The Environment Agency's *Emergency backup diesel engines on installations: BAT*; Relevant BAT principles from the Large Combustion Plant BREF; and Relevant aspects of the Environment Agency's former combustion activity guidance.

Where standard combustion BAT expectations conflict with nuclear safety requirements, we have considered the Operator's justification for the proposed approach and whether alternative techniques would provide a greater level of environmental protection. Our assessment of BAT is set out below.

Generator Technology Selection:

The generators included within this variation provide emergency power to safety-critical systems and infrastructure in the event of a loss of off-site power (LOOP). The key requirements for the emergency power system are reliability, rapid start-up and independence from off-site systems and services. Fast start-up is a fundamental requirement, as electrical power must be restored to essential systems almost instantaneously following a LOOP. This is why diesel generators are the preferred option in the design of pressurised water reactors around the world.

Diesel generators are a proven and highly reliable technology capable of restoring power to essential systems within a very short period of time following a LOOP event. The use of diesel generators for emergency power supply forms part of the existing Hinkley Point C design and the current permit already

authorises the operation of Essential Diesel Generators (EDGs) and Ultimate Diesel Generators (UDGs) for this purpose.

Having considered the role of the generators and the information submitted in support of this variation, we are satisfied that diesel generators continue to represent BAT for the provision of emergency power at this installation.

Essential Diesel Generators (EDGs) and Ultimate Diesel Generators (UDGs):

The EDGs and UDGs form part of the UK EPR (European Pressurised Reactor) design assessed through the Generic Design Assessment process and are required to satisfy the nuclear safety case. As safety-classified equipment, the generators must meet stringent qualification requirements to demonstrate that they can perform their intended function under a range of fault and emergency conditions. These generators provide power to key safety-classified systems and are required to enable the reactor to achieve and maintain a safe shutdown state following a LOOP event.

The Operator's BAT assessment drew upon the assessment previously undertaken for the equivalent systems proposed at Sizewell C. Although the two projects are being run by separate legal entities, they both have a significant shareholding by the EDF group of companies, and have arrangements in place to share the design, knowledge and experience to benefit both. We therefore considered the applicability of that assessment to this variation and are satisfied that its conclusions remain relevant because the EDGs and UDGs perform the same safety-critical function and are based on the same UK EPR design.

Having considered the qualification requirements associated with the UK EPR design, the critical safety role of the generators and the assessment of alternative technologies, we are satisfied that the proposed EDGs and UDGs represent BAT for this installation.

Emission Standards:

For new standby plant, we normally consider BAT to be the use of generators capable of meeting the emission standards set out in the Environment Agency's guidance for emergency back-up diesel engines.

The EDGs and UDGs do not meet the TA-Luft 2g NO_x emission standard. However, as discussed above, these generators fulfil a critical nuclear safety function and are required to meet the qualification requirements associated with the UK EPR design and nuclear safety case. Having considered the information provided by the Operator, we are satisfied that a departure from the emission standards normally expected for standby generators is justified in this case.

The Operator has committed to procuring the additional generators covered by this variation to meet the TA-Luft 2g NO_x emission standard. We consider this appropriate because, where nuclear safety qualification requirements do not

apply, these generators can be designed and operated in accordance with the emission standards normally expected for new standby plant.

Taking account of the critical safety function of the EDGs and UDGs, the commitment to procure the remaining generators to the TA-Luft 2g standard and the conclusions of the air quality assessment, we are satisfied that the proposed arrangement represents BAT for the installation.

Stack Design:

Vertical, unobstructed stacks are generally considered BAT because they promote effective dispersion of emissions to air. However, some of the generators included within this variation are fitted with rain caps or horizontal discharges in accordance with nuclear safety requirements.

The Operator has demonstrated that these design features are necessary to prevent the ingress of water and foreign objects which could adversely affect the operation of safety-critical plant. The affected generators provide important emergency functions and must be capable of operating reliably following a loss of off-site power event.

We have considered the proposed stack arrangements and are satisfied that the departure from the stack configurations normally expected for combustion plant is justified by the operational and nuclear safety requirements of the installation. We therefore consider the proposed stack design to represent BAT for this installation.

Emission Control:

As set out in the Emission Standards section above, the proposed generators have been selected to minimise emissions whilst meeting the operational and nuclear safety requirements of the installation.

No secondary emissions abatement technology is proposed for the generators. Emissions will instead be minimised through a combination of engine design, fuel specification, preventative maintenance and limited operating hours.

The generators will operate only for commissioning, testing, maintenance and emergency situations. The Operator will implement a preventative maintenance programme designed to maximise plant availability, maintain efficient engine performance and minimise the risk of unplanned outages. This will help ensure emissions remain minimised and the generators continue to operate efficiently throughout their operational life.

The Operator considered secondary abatement techniques for the control of emissions to air. Taking account of the operating characteristics of the generators, their safety-critical role where applicable, the limited operating hours proposed and the conclusions of the air quality assessment, we are satisfied that additional abatement is not required to achieve BAT for this installation.

Operation and Testing:

The operation of the generators will be minimised, and, under normal circumstances, they will run only for commissioning, periodic maintenance and testing, or in response to a LOOP event.

Periodic testing is necessary to ensure that the generators remain capable of fulfilling their intended function when required. The Operator has demonstrated that the proposed testing regime has been developed to meet operational and nuclear safety requirements whilst minimising operating hours and associated emissions.

Some generators are required to be tested for more than 50 hours per year to satisfy commissioning, maintenance or safety requirements. In addition, certain generators may be tested simultaneously to demonstrate their ability to operate concurrently where this would be required during an emergency scenario. The Operator has also identified a number of mobile or plug-in generators that have no routine commissioning or maintenance testing regime and are expected to operate only in emergency circumstances.

Taking account of the safety-critical role of the generators, we are satisfied that the proposed testing arrangements represent BAT and that operating hours have been minimised so far as practicable whilst maintaining the required level of reliability.

Fuel Specification:

This variation updates the existing permit fuel specification, reducing the maximum permitted sulphur content from 0.1% w/w to 0.001% w/w (10 ppm). The Operator has committed to the use of ultra-low sulphur fuel, and we have reflected this through a limit in Table S2.1 of the permit. The use of ultra-low sulphur fuel minimises sulphur dioxide emissions.

Gas oil is well suited to standby emergency power systems due to its reliability, suitability for long-term storage and compatibility with the operational requirements of the generators. We therefore agree that gas oil is BAT.

Fuel consumption is expected to be low as the generators will operate primarily during commissioning, testing and emergency situations. Whilst there is a requirement to maintain diversity within the fuel supply chain, all suppliers will be required to provide fuel that complies with the specified sulphur content.

We are satisfied that the proposed fuel selection and fuel specification represent BAT for this installation. The permit also provides flexibility for the future use of alternative fuels, where these have been demonstrated to be environmentally acceptable.

The Operator has indicated that, in the future, the generators may be operated on an alternative fuel in place of gas oil. The permit therefore specifies that the

engines may be fuelled using gas oil, or an equivalent substitute fuel agreed in writing by the Environment Agency, with a sulphur content not exceeding 0.001% w/w.

At the time of determination, Hydrotreated Vegetable Oil (HVO) is the only substitute fuel for gas oil that the Environment Agency has agreed may be used without requiring prior site-specific assessment. HVO is increasingly used across the combustion sector as a lower-carbon alternative to conventional fossil fuels and is subject to equivalent fuel quality standards, including limits on sulphur content. We are satisfied that the use of HVO would not result in emissions greater than those associated with gas oil and, therefore, no further assessment is required. While a permit variation is not required, the Operator should notify the Environment Agency in writing before first using HVO as a substitute for gas oil.

For any other substitute fuel, the Operator must obtain the Environment Agency's written agreement before use. This will allow the suitability of the proposed fuel, and any implications for emissions or environmental risk, to be assessed before use. Should the Environment Agency subsequently determine that additional substitute fuels may be used without prior site-specific assessment, those fuels may be used in accordance with the relevant Environment Agency guidance and requirements in place at that time.

Energy Efficiency:

The installation will generate electricity only and has been specified to maximise electrical output with little or no use of waste heat. The generators are standby plant that will operate primarily during commissioning, testing and emergency situations. Reliability and availability are therefore key design requirements. Having considered the information submitted by the Operator, we are satisfied that appropriate measures will be in place to ensure energy is used efficiently within the installation. Permit condition 1.2.1 requires the Operator to use energy efficiently.

Raw Materials and Water Use:

Raw material and water consumption associated with the generators is expected to be low due to their infrequent operation. Having considered the information submitted by the Operator, we are satisfied that appropriate measures will be in place to ensure the efficient use of raw materials and water.

Fuel Storage and Handling:

Fuel and oil storage systems are provided with appropriate secondary containment, spill management measures and drainage controls to minimise the risk of pollution to land and groundwater.

Fuel storage tanks and associated day tanks are located within the generator buildings and housed within sealed concrete containment areas designed to retain spillages and prevent releases to the environment. Any collected fuel will be directed to a sump for removal and appropriate disposal. Storage arrangements are designed to comply with the Oil Storage Regulations.

Tanker loading and unloading operations take place within dedicated containment areas designed to capture and contain any accidental releases. Drainage from these areas is directed to the site's oily water management system.

We have reviewed the proposed fuel and oil storage arrangements and are satisfied that suitable measures are in place to contain accidental releases and provide adequate protection to land and groundwater. We therefore consider the proposed fuel storage and handling arrangements to represent BAT for this installation.

Waste Generation and Management:

The activities covered by this variation are not expected to significantly alter the quantity or nature of waste produced by the installation. Waste arising from the operation and maintenance of the generators is expected to be limited and will be managed together with other non-radioactive waste generated across the HPC site.

The Operator will segregate and store waste within designated areas incorporating appropriate pollution prevention measures. Waste will be managed in accordance with the site's Waste Management Plan and the waste hierarchy will be applied where appropriate. Where possible, waste will be recovered or recycled, with any hazardous waste sent off site for appropriate treatment or disposal.

We are satisfied that appropriate measures will be in place to minimise the environmental impact of waste generated by the installation.

Overall BAT Conclusion:

We have reviewed the proposed operating techniques and are satisfied that the installation will be designed, constructed and operated using BAT. The assessment has demonstrated that emissions and environmental risks will be minimised through appropriate engine selection, emission standards, operational controls, fuel specification, maintenance arrangements and pollution prevention measures.

Where standard combustion BAT expectations conflict with nuclear safety requirements, we are satisfied that the Operator has provided an appropriate justification and that the proposed approach represents BAT for this installation.

Taking account of the conclusions of the environmental assessments and the controls included within the permit, we are satisfied that the installation will be operated in a way which provides a high level of protection for the environment.

Environmental impact

Regulated activities can present different types of risk to the environment, including odour, noise and vibration, accidents, fugitive emissions to air and water, releases to air, discharges to ground or groundwater and generation of waste. Consideration has also been given to the effect of emissions being deposited onto land (where there are ecological receptors).

The next sections of this document explain how we have approached the critical issue of assessing the likely impact of the emissions from the installation on human health and the environment and what measures we are requiring to ensure a high level of protection.

Emissions to Air - Assessment Methodology

We assessed emissions to air in accordance with our guidance *Air emissions risk assessment for your environmental permit*. The assessment uses the concept of a process contribution (PC), which is the predicted concentration of a pollutant in the environment arising from the proposed activity. Screening criteria are applied to identify emissions that are unlikely to have a significant impact.

The Operator submitted a detailed air dispersion modelling assessment to predict pollutant concentrations at environmental receptors that may be affected by emissions from the installation.

Predicted pollutant concentrations were assessed against relevant environmental standards, including Ambient Air Directive limit values, Air Quality Strategy objectives and Environmental Assessment Levels, as appropriate. Where emissions could not be screened out, further assessment was undertaken by considering the predicted environmental concentration (PEC), which represents the combined effect of the PC and existing background concentrations.

Operating regimes

The generators will operate under several distinct regimes, each of which was considered within the risk assessments and air quality modelling:

- Commissioning: Initial testing undertaken to confirm that generators are correctly installed and capable of performing their intended function before entering service.
- Routine testing: Periodic testing and maintenance activities undertaken throughout the operational life of the installation to ensure generator availability and reliability.
- LOOP events: Emergency operation following the loss of electrical supply from the National Grid, during which the back-up generators provide power necessary to maintain nuclear safety functions.

The assessment considered a range of operating scenarios within these regimes, including both normal testing activities and emergency operation. Scenarios involving the EDGs and UDGs were a particular focus of the assessment, as these are the largest generators on the installation and have the potential to give rise to the greatest environmental impact. The environmental assessment was based on the operating scenarios considered most representative of the worst-case impacts. Where these scenarios were shown to be acceptable, lesser operating scenarios were also considered acceptable.

Assessment of Impact on Air Quality

The Operator's assessment of air quality impacts is set out in Appendix B of the application and subsequent addendum. The assessment comprises air dispersion modelling of emissions from the operation of the site's back-up generators and an evaluation of potential impacts on human health and ecological receptors.

The assessment was undertaken using ADMS 6 air dispersion modelling software and incorporated five years of site-specific meteorological data. The installation is not located within an Air Quality Management Area (AQMA).

The assessment considered emissions from the Essential Diesel Generators (EDGs), Ultimate Diesel Generators (UDGs) and smaller standby generators associated with Hinkley Point C. Pollutants assessed included nitrogen oxides (NO_x), nitrogen dioxide (NO₂), particulate matter (PM₁₀ and PM_{2.5}), carbon monoxide (CO) and sulphur dioxide (SO₂).

The modelling considered commissioning, routine testing and LOOP scenarios. For commissioning, a range of plausible operating scenarios were assessed, including simultaneous operation of the EDGs and UDGs under representative testing conditions. The LOOP assessment considered the operation of the generators following the loss of grid connection to both reactor units.

All generators have been modelled as point source emissions, with the locations provided in the Air Quality Modelling Report under Figure 2.1.

We audited the Operator's modelling methodology, assumptions and conclusions and undertook sensitivity testing where appropriate. Whilst we did not agree with all of the modelling assumptions and resulting numerical predictions, we concluded that the modelling provided a suitable basis for the assessment of impacts on human health and ecological receptors and could be used to inform our determination. The findings of our audit are reflected in the assessments below.

Assessment of Air Dispersion Modelling Outputs: Human health assessment

The Operator modelled pollutant concentrations at 42 receptor locations representing residential properties, accommodation and locations of short-term

public exposure. As part of our audit, we included an additional 20 receptor locations identified during previous assessments of Hinkley Point C. We consider the combined receptor set to be representative of locations where human exposure is likely to be greatest.

The Operator's predicted maximum PCs and PECs at human receptors are presented in Tables 4.1, 4.2, 4.5, 4.6, 4.9, 4.10, 4.13, 4.15 and 4.17 of the assessment report. As the assessment considers multiple commissioning, testing and emergency scenarios, the detailed modelling results are not reproduced here. Instead, the key findings relevant to permit determination are summarised below.

The key findings of the Operator's assessment relevant to permit determination were:

- The modelling predicts exceedances of the 1-hour 99.79th percentile NO₂ environmental standard (ES) for Commissioning Scenarios B and C, the Routine Testing scenario and both LOOP scenarios.
- Exceedances of the US EPA Acute Exposure Guideline Level (AEGL-1) for NO₂ are also predicted for the LOOP scenarios. However, probability analysis undertaken as part of their assessment indicated that the likelihood of exceeding the permitted number of hourly exceedances was less than 0.1% and therefore these impacts were considered not significant.
- For PM₁₀, CO and SO₂, the modelling predicts PCs above the relevant screening thresholds for some operating scenarios and averaging periods. Consequently, these emissions could not be screened out as insignificant and further assessment using PECs was required. However, no exceedances of the relevant environmental standards were predicted for these pollutants in any scenario.

As part of our audit, we reviewed the modelling assumptions and undertook independent checks and sensitivity testing. Our assessment found that:

- For the commissioning, testing and emergency scenarios, we predict no exceedances of the relevant environmental standards at any identified human health receptor locations, with the exception of the 1-hour 99.79th percentile NO₂ standard for the Commissioning C (Unit 1), Testing and LOOP B scenarios when applying a 35% NO_x to NO₂ conversion rate. Applying a lower conversion rate, we still predict exceedances; however, the hypergeometric probability distribution indicates that the probability of exceedance is very low (<1%) for all scenarios.
- We do not predict exceedances of AEGL-1 for the LOOP scenario where the Operator's modelling does. This is due to differences in the treatment of NO_x to NO₂ conversion. The Operator applied a conservative short-term conversion rate of 35%, whereas our audit considered the sensitivity of the results to

lower conversion rates that may be more representative at locations close to the emission sources.

Therefore, whilst we do not agree with all of the absolute numerical predictions, we are satisfied that the assessment provides a reasonable worst-case representation of impacts at human health receptors and agree with the Operator's overall conclusion that emissions from the proposed combustion activities are not expected to result in significant impacts on human health.

Assessment of Air Dispersion Modelling Outputs: Habitats Assessment

This section provides a summary of the Habitats Regulations Assessment (HRA) undertaken for the application. The detailed assessment, including the modelling results, screening assessments and Appropriate Assessments, is provided in the HRA and the Appendix 4 Site of Special Scientific Interest (SSSI) Assessment, both of which are available on the public register. This summary focuses on the key receptors, risks and conclusions relevant to the determination of the application.

There is a prescribed screening process for the assessment of likely significant effects for aerial emissions and deposition. Our guidance sets out that if the PC is:

- Long-term emissions with a PC less than 1% of the relevant critical level or critical load are not considered significant.
- Where the PC exceeds 1%, the PEC (PC + background) must be considered.
- Long-term emissions are screened out where the PEC is less than 70% of the relevant critical level or critical load.
- Where the PEC exceeds 70%, Appropriate Assessment is required.
- Short-term effects of pollutants, including NO_x, are assessed against the relevant critical level and require further assessment where the PC exceeds 10%.

There are no short-term critical loads and no requirement to consider short-term effects in combination with background concentrations.

The Operator modelled the predicted emissions of nitrogen oxides (NO_x), sulphur dioxide (SO₂), and the deposition of nutrient nitrogen and acidification at the designated sites identified below.

The Operator modelled the emissions to areas of land within the designated sites, including areas exposed at low tide where deposition to land may occur. For designated sites further from the installation, a representative modelling point was used. The highest impacted receptor locations were used to inform our assessment.

Our assessment is based on the air quality modelling submitted by the Operator in support of the application. We audited the modelling methodology,

assumptions and results and concluded that it was suitable to inform our determination.

The Air Pollution Information System (APIS) was used to identify the qualifying features most sensitive to emissions from the combustion activity and to obtain the relevant critical levels for assessing direct toxic effects and critical loads for assessing nitrogen deposition and acidification. We reviewed these and confirmed they were appropriate for use in the assessment. There are currently no published conservation objectives for Ramsar sites; therefore, where Ramsar features correspond to the qualifying features of a Special Area of Conservation (SAC) or Special Protection Area (SPA), the relevant SAC and SPA conservation objectives were applied to the equivalent Ramsar features.

There are four European sites within 10km of the installation that are relevant for screening for potential direct and indirect effects from the combustion plant:

- Severn Estuary / Môr Hafren SAC
- Severn Estuary / Môr Hafren SPA
- Severn Estuary / Môr Hafren Ramsar
- Exmoor and Quantocks Oakwoods SAC

The Severn Estuary SAC is located adjacent to the site's northern boundary. The SAC boundary overlaps with the Severn Estuary SPA and Severn Estuary Ramsar. The Exmoor and Quantocks Oakwoods SAC is located approximately 6km to the southwest of the site.

The Somerset Levels and Moors SPA and Ramsar were also considered due to the potential functional linkage between their qualifying bird populations and the habitats of the Severn Estuary.

There are also two SSSI sites within 2 km of the installation that are relevant for screening for potential direct and indirect effects from the combustion plant:

- Bridgwater Bay SSSI
- Blue Anchor to Lilstock Coast SSSI

Bridgwater Bay SSSI is adjacent to the northern boundary of HPC. Blue Anchor to Lilstock Coast SSSI is located approximately 100 m north-west of HPC and is designated for its coastal geological features. The key management principle for this site is to maintain exposure of the geological interest by allowing natural processes to proceed freely. The designated features are not sensitive to air pollution impacts; therefore, the site was not considered further in our assessment.

As the air quality assessment considered a range of operating scenarios, the scenario resulting in the highest predicted impact for a given pollutant and assessment endpoint was used to inform our assessments. As these worst-case

scenarios are protective of the remaining scenarios, separate assessments of the lower impact scenarios were not required.

We assessed the potential direct and indirect effects of emissions of nitrogen oxides (NO_x), sulphur dioxide (SO₂), nutrient nitrogen deposition and acidification on the qualifying features of the designated European sites and SSSI. The HRA and Appendix 4 SSSI Assessment set out the full assessment process and conclusions, including screening and, where required, more detailed assessment. The detailed assessments are available on the public register (see below).

Whilst there are aerial pathways of effect from the use of the generators and sensitive receptors within the designated sites, it has been possible to conclude:

- Following screening, Appropriate Assessment and, where required, in-combination assessment, the proposed variation would not adversely affect the integrity of the Severn Estuary SAC, SPA and Ramsar, Somerset Levels and Moors SPA and Ramsar, or Exmoor and Quantocks Oakwoods SAC.
- the proposed variation is not likely to damage the features of Bridgwater Bay SSSI.

Natural England agrees with our assessment methodology and conclusions.

Full details of the HRA and Appendix 4 SSSI Assessment can be seen in the documents "HPC Combustion Activity Permit V004_HRA" and "HPC Combustion Activity V004_SSSI Assessment" available on the Public Register.

Assessment of Air Dispersion Modelling Outputs: Non-statutory Conservation Sites

Conservation sites are afforded different levels of protection under environmental legislation. European sites (including SACs and SPAs) and SSSIs receive specific statutory protection, whereas other sites such as Local Wildlife Sites are not subject to the same legislative requirements. However, these sites remain important components of the ecological network and support biodiversity by complementing and linking nationally and internationally designated sites.

The Operator's report also considered background pollutant concentrations. Whilst these are relevant when assessing potential effects on SACs, SPAs, Ramsar sites and SSSIs, they are not relevant to our assessment of these other ecological receptors. In assessing impacts on these other conservation sites, we consider whether emissions from the installation could result in significant pollution. Unlike assessments for European sites and SSSIs, which consider both background concentrations and the PC, this assessment focuses on the PC from the installation itself. This provides a proportionate approach, reflecting the different legislative protections afforded to these sites whilst ensuring protection against significant pollution.

Critical levels and critical loads are used to assess the potential for effects on ecological receptors. The assessment criteria applied to European sites and SSSIs are more stringent than those applied to other conservation sites, reflecting the different levels of statutory protection. We would generally conclude that the installation is not causing significant pollution at these other sites where the PC is below the relevant critical level or critical load and BAT are being used to control emissions.

The Operator submitted an updated report on 6 June 2026, we have based our assessment on this report (*NNB Generation Company Ltd Hinkley Point C - Permit Number EPR/ZP3238FH Air Quality Modelling Addendum Report, May 2026*).

The following non-statutory local wildlife and conservation sites are located within 2 km of the installation:

- Hinkley Local Wildlife Site (LWS)
- Blue Anchor to Lilstock Cliff LWS
- Cole Pool Field LWS
- Mud House Copse LWS
- Honibere Wood LWS & Ancient Woodland
- Wick Park Covert LWS
- Somerset Wetlands National Nature Reserve.

For all operating scenarios (testing, commissioning and LOOP), the modelling indicates that the only exceedances of the relevant assessment criteria are for short-term nitrogen oxides (NO_x).

Although short-term NO_x PCs exceed the relevant critical levels, these emissions arise from short-duration and infrequent operation of the generators. The Chartered Institute of Ecology and Environmental Management (CIEEM) Advisory Note: *Ecological Assessment of Air Quality Impacts* notes that the UNECE Working Group on Effects strongly recommends use of the annual mean NO_x critical level, as long-term exposure is considered to be of greater significance than short-term exposure.

Annual mean NO_x concentrations and all other assessed pollutants were screened out as insignificant, with predicted PCs below the relevant assessment criteria at all assessed sites. The assessment therefore indicates that operation of the generators would not result in a sustained deterioration in air quality at these receptors. We are also satisfied that the generators represent BAT for the installation (see the 'Best Available Techniques (BAT) assessment' section of this Decision Document).

Taking account of the precautionary nature of the assessment, the short-duration and infrequent operation of the generators, the fact that annual mean NO_x concentrations and all other pollutants have screened out as insignificant, and

the application of BAT, we conclude that operation of the installation will not result in significant pollution at the assessed Local Wildlife Sites, Ancient Woodland or National Nature Reserve.

Other emissions

Noise

The Operator submitted a detailed Noise modelling report with their application. The operational noise propagation model for the HPC site was updated to reflect the latest design layout, including the back-up diesel generator related noise sources.

The report predicted the worst-case noise emission levels from the operation of the Essential Diesel Generators. The assessment has been undertaken under LOOP conditions, whereby all sources are operating simultaneously and continuously. Generators will be run intermittently during the commissioning phase and during short-term routine scheduled testing. During these activities, operation will predominantly be restricted to daytime only. Therefore, it is considered that noise emissions during commissioning and maintenance/testing scenarios would be at least 3-10dB lower than those considered within the assessment.

The modelling study utilised Cadna A Noise Prediction Model (Version 2025) software. The model incorporated the local topography, meteorological conditions and existing and proposed buildings.

There is a large separation distance (at least 1 km) between the EDGs/UDGs and the nearest noise sensitive receptors. As part of the wider design of HPC and landscaping to the south, the noise propagation pathways from the EDG/UDG buildings are largely screened.

Generators will be housed within buildings or dedicated container units, with noise breakout predominantly from air intake/exhausts and cooling/ventilation panels. Heavy access/fire doors will significantly attenuate noise breakout. Routine inspections and maintenance will ensure optimal operational condition of generators and ancillary equipment.

The results of the model indicated that the predicted noise levels associated with operation of the generators at HPC will not result in an adverse impact at the nearest ecological or residential sensitive receptors.

The potential effects of noise on designated ecological receptors were assessed through the HRA and Appendix 4 SSSI Assessment. The assessment considered the qualifying bird features of the Severn Estuary SPA, Severn Estuary Ramsar and Bridgwater Bay SSSI, together with functionally linked bird populations associated with the Somerset Levels and Moors SPA and Ramsar. The

assessment used the worst-case LOOP scenario, under which all generators were assumed to operate simultaneously and continuously.

Noise from the generators was predicted to be highly localised and to reduce rapidly with distance from the site. Although small areas of potentially suitable habitat occur close to HPC, the nearest substantial areas of supporting intertidal mudflat and saltmarsh habitat are located over 1 km and 2.5 km from the site respectively. The assessment concluded that the noise would be continuous and non-impulsive in nature, would generally be at or below background levels within the designated sites, and would not result in a continuing or sustained change in the distribution, abundance or behaviour of designated bird populations.

We agree with the Operator's conclusions and are satisfied that noise from the generators, whether during commissioning, routine testing or the worst-case LOOP scenario, will not result in significant adverse effects at nearby residential receptors, adversely affect the integrity of any European site, or damage the features of a SSSI.

In the unlikely event of a noise complaint at the HPC Site, the Operator will follow its established complaints procedure. When following the procedure, the complaint will be investigated and appropriate further action taken as necessary.

Water

There are no changes to the regulatory approach for water discharges as a result of this variation. Emissions to water from the operation of the site are regulated under Water Discharge Activity Permit EPR/HP3228XT and existing and proposed discharges associated with Hinkley Point C are assessed and controlled through that permit.

As recognised in the original permit determination, there is potential for point source releases to water from surface water run-off and potentially contaminated drainage associated with oil storage. All oily water drains on site are routed through an oil/water separator before discharge under permit EPR/HP3228XT.

On-site storage of fuel will be within the building in bunded rooms. There will be no internal drains within the rooms and any spills would be captured in a sump and pumped out and disposed off-site as hazardous waste. Forecourt oil/water separators are to be provided at all locations where fuel handling will take place. All operations will comply with the Oil Storage Regulations for Business, with spill prevention and response procedures in place.

We are satisfied that the proposed variation does not introduce any significant new risks to the water environment. Emissions to water will continue to be appropriately managed through the existing drainage arrangements and the controls in Water Discharge Activity Permit EPR/HP3228XT.

Decision considerations

Confidential information

A claim for commercial or industrial confidentiality has not been made.

Identifying confidential information

We have not identified information provided as part of the application that we consider to be confidential.

The decision was taken in accordance with our guidance on confidentiality.

Consultation

The consultation requirements were identified in accordance with the Environmental Permitting (England and Wales) Regulations (2016) and our public participation statement.

We consulted the general public and interested parties on the permit application between 18 May and 16 June 2026. The application was publicised on the GOV.UK website and we made a copy of the application available to view on Citizen Space on our website. The permit application was also advertised in the local newspapers (South Wales Echo, the Bridgwater Mercury, Burnham & Highbridge Weekly News, and the West Somerset Free Press (inc. Wellington Evening News)) in both local paper print (in week commencing 18th May 2026) and online formats, which could be read by people living near to the installation, as well as nationally.

We consulted the following organisations:

- Health and Safety Executive (Office for Nuclear Regulation)
- Health and Safety Executive (Wales)
- Director of Public Health
- UK Health Security Agency (UKHSA)
- Local Authority (Somerset Council) – Environmental Protection Department
- Local Authority (Somerset Council) – Planning
- Welsh Assembly Government
- Natural Resources Wales
- Natural England
- Welsh Local Authorities:
 - Vale of Glamorgan Council
 - Cardiff Council
 - Newport City Council

- Bridgend County Borough Council

The comments and our responses are summarised in the consultation responses section.

The regulated facility

We considered the extent and nature of the facility at the site in accordance with RGN2 'Understanding the meaning of regulated facility', Appendix 2 of RGN2 'Defining the scope of the Installation', and Appendix 1 of RGN 2 'Interpretation of Schedule 1'.

The extent of the facility is defined in the site plan and in the permit. The activities are defined in table S1.1 of the permit.

This permit allows the operation of an installation which is subject principally to the Industrial Emissions Directive (IED) (Chapter II). Aggregation rules under the Article 29 of IED are not applicable to this installation as releases to air are not via a common stack, nor do we think that they should be. For the purpose of nuclear safety, each diesel generator must have a separate, independently operated stack.

The installation is subject to the Environmental Permitting Regulations 2016 (EPR 2016) because it carries out an activity listed in Part 1 of Schedule 1 to the EPR: *Section 1.1 Part A(1) (a): Burning any fuel in an appliance with a rated thermal input of 50 megawatts or more.*

Individual combustion plants of 1 MW thermal input and above are also medium combustion plants and therefore are also subject to the Medium Combustion Plant Directive (MCPD).

An installation may also comprise 'directly associated activities', which at this installation includes fuel oil storage. In total, these activities are one installation, because the diesel generators and fuel storage are successive steps in an integrated activity.

Together, these listed and directly associated activities comprise the installation.

The site

The Operator has provided a plan which we consider is satisfactory, showing the extent of the site of the facility. The plan is included in the permit.

Site condition report

The variation increases the permitted installation boundary within the wider nuclear power station site; however, no updated Site Condition Report (SCR) has been submitted as part of this application.

The installation continues to be under construction and will be subject to further excavation, backfilling and ground disturbance prior to operation. As such, a final baseline in accordance with Article 22(2) of the Industrial Emissions Directive (IED) is not required at this stage and will instead be established progressively through the implementation of amended pre-operational condition PO3.

PO3 requires the Operator to submit an initial SCR prior to commencement of commissioning, based on the information available at that time, together with a phased SCR update programme. The SCR must then be updated in accordance with a programme agreed in writing with the Environment Agency to ensure that all areas of the installation are incorporated into the SCR before combustion plant located within those areas is commissioned. This approach will ensure that the condition of the land, including the areas added by this variation, is appropriately characterised as construction progresses and that the requirements of Article 22(2) of the IED are met prior to operation of the relevant parts of the installation.

Improvement Condition IC2 requires the Operator to submit a protocol for the periodic monitoring of soil and groundwater required by permit condition 3.2.4. Condition 3.2.4 has been updated to align with current standard permit wording, which requires periodic monitoring of groundwater and soil unless an alternative approach is justified through a systematic appraisal of the risk of contamination. The protocol required by IC2 will set out how the Operator will meet these requirements and demonstrate compliance with Articles 14(1)(b), 14(1)(c), 14(1)(e) and 16(1) of the Industrial Emissions Directive. This will ensure appropriate arrangements are established for the assessment and ongoing protection of soil and groundwater throughout the operational life of the installation.

We are therefore satisfied that appropriate measures are in place to establish the baseline condition of the site and to protect soil and groundwater throughout the operational life of the installation.

Nature conservation, landscape, heritage and protected species and habitat designations

We have checked the location of the application to assess if it is within the screening distances we consider relevant for impacts on nature conservation, landscape, heritage, protected species and habitat designations. The application is within our screening distances for these designations.

We have assessed the application and its potential to affect sites of nature conservation, landscape, heritage, protected species and habitat designations identified in the nature conservation screening report as part of the permitting process.

We consider that the application will not affect any site of nature conservation, landscape and heritage, and/or protected species or habitats identified.

We have consulted Natural England on our Habitats Regulation and SSSI assessments and taken their comments into account in the permitting decision. Natural England agrees with our assessment methodology and conclusions, see key issues section of this Decision Document for further details of our assessment.

The decision was taken in accordance with our guidance.

Environmental impact assessment

In determining the application, we have considered the Environmental Statement.

We have also considered the planning permission (Development Consent Order) and the report approving it.

Environmental risk

We have reviewed the operator's assessment of the environmental risk from the facility.

The operator's risk assessment is satisfactory.

General operating techniques

We have reviewed the techniques used by the Operator and compared these with the relevant guidance notes and we consider them to represent appropriate techniques for the facility.

The operating techniques that the Applicant must use are specified in table S1.2 in the environmental permit.

Operating techniques for emissions that do not screen out as insignificant

Emissions of short-term NO_x cannot be screened out as insignificant. We have assessed whether the proposed techniques are Best Available Techniques (BAT).

We consider that the proposed techniques for emissions that do not screen out as insignificant represent appropriate techniques for the facility.

Where standard combustion BAT expectations conflict with nuclear safety requirements, we are satisfied that the Operator has provided appropriate justification and that the proposed approach represents BAT for this installation.

Refer to the Key Issues section of this Decision Document for further information on our assessment of BAT and emissions to air, including short-term NOx impacts.

Operating techniques for emissions that screen out as insignificant

For emissions which have been screened out as insignificant, we agree that the applicant's proposed techniques are Best Available Techniques (BAT) for the installation.

Where standard combustion BAT expectations conflict with nuclear safety requirements, we are satisfied that the Operator has provided appropriate justification and that the proposed approach represents BAT for this installation.

National Air Pollution Control Programme

We have considered the National Air Pollution Control Programme as required by the National Emissions Ceilings Regulations 2018. By setting emission limit values in line with technical guidance we are minimising emissions to air. This will aid the delivery of national air quality targets. We do not consider that we need to include any additional conditions in this permit.

Updating permit conditions during consolidation

We have updated permit conditions to those in the current generic permit template as part of permit consolidation. The conditions will provide the same level of protection as those in the previous permit.

Raw materials

We have specified limits and controls on the use of raw materials and fuels:

Gas oil or equivalent substitute to be agreed in writing with the Environment Agency: Less than 0.001% sulphur content

The Operator has confirmed that low-sulphur diesel (equivalent to 0.001% sulphur) will be used. This specification has therefore been included as a limit in Table S2.1 of the permit and applies to any fuel (including gas oil or equivalent)

used in the generators. The previous permit specified a sulphur content of 0.1% and referred to “gas oil from 2008”. This reference relates to historic fuel sulphur standards and is no longer required, as current fuel specifications meet or exceed these requirements.

Pre-operational conditions

The pre-operational measures were reviewed as part of this variation. PO1 has been retained unchanged. PO2 and PO3 have been amended to reflect the phased construction and commissioning programme for the installation whilst maintaining the underlying environmental objectives of the original measures. PO4 has been replaced with Improvement Condition IC2.

PO2 has been amended to reflect the phased delivery of the site's drainage infrastructure. At the commencement of commissioning, temporary drainage and containment arrangements will remain in operation prior to transition to the permanent operational drainage system. The amended condition therefore requires the drainage plan to identify both the temporary drainage arrangements in place during commissioning and the permanent operational drainage arrangements. This ensures the Environment Agency has sufficient information to understand the management of drainage and containment throughout commissioning and operation without altering the underlying objective of the condition.

PO3 has been amended to reflect the phased construction and commissioning programme for the installation. The original requirement for a single baseline report submission six months prior to commissioning is no longer considered practical given that construction, backfilling and commissioning activities will occur in phases across the site. The amended condition requires the submission of an initial Site Condition Report (SCR) prior to commencement of commissioning, based on the information available at that time, together with a phased SCR update programme. The SCR must then be updated in accordance with an update programme agreed in writing with the Environment Agency to ensure that all areas of the installation are incorporated into the SCR before combustion plant located within those areas is commissioned. This approach maintains the objective of Article 22 of the Industrial Emissions Directive by ensuring an appropriate baseline is established before operation begins, whilst providing a practical mechanism for the baseline to be expanded as construction activities are completed across the installation.

PO4 has been replaced with Improvement Condition IC2. The original requirement related to the development of a protocol for periodic soil and groundwater monitoring required by permit condition 3.2.4. Following review, the Environment Agency concluded that the protocol is not required to support

commissioning activities and can be secured more appropriately through the improvement programme.

Improvement programme

The existing improvement condition (IC1) has been retained unchanged. As the installation has not yet commenced operation, the trigger for the condition has not yet been reached. The condition will apply to the installation as varied, including the additional generators authorised through variation V004. No amendments to the wording of the condition were considered necessary.

A new improvement condition (IC2) has been added to require the submission of the soil and groundwater monitoring protocol referenced in permit condition 3.2.4. Condition 3.2.4 has been updated to align with current standard permit wording, allowing the frequency of soil and groundwater monitoring to be determined through a systematic appraisal of the risk of contamination where appropriate. The protocol required by IC2 will establish how the Operator will meet these requirements throughout the operational life of the installation. The Environment Agency considers an improvement condition to be a more proportionate mechanism for securing this requirement than a pre-operational condition.

IC2 requires the protocol to be submitted within 12 months of commencement of commissioning of the first phase of the installation, or by an alternative date agreed in writing with the Environment Agency. This timescale is considered proportionate because the protocol supports periodic monitoring undertaken over the operational life of the installation and is not required to support commissioning.

Emission limits

For the Essential Diesel Generators (EDGs) and Ultimate Diesel Generators (UDGs), previously referred to as Station Blackout Diesel Generators, Emission Limit Values (ELVs) have been removed for the following substances:

- Oxides of Nitrogen (NO and NO₂ expressed as NO₂)
- Carbon monoxide
- Particulate matter

The EDGs and UDGs will now operate under the limited-hours exemption provided by Article 6(3) of the Medium Combustion Plant Directive (MCPD). This exemption applies to emergency-use medium combustion plant (MCP) operating

for no more than 500 hours in any calendar year. As a result, the ELVs specified in Annex II of the MCPD do not apply.

The same operating restrictions apply to the additional MCP generators added by this variation and, consequently, no ELVs have been included in Table S3.1 of the permit. The remaining combustion plant added by this variation have a thermal input of less than 1 MWth per unit and are therefore outside the scope of the MCPD and not subject to ELV requirements.

The ELVs that were previously included for the EDGs and UDGs were based on the original application and were set prior to the publication of the MCPD. Consequently, they are much higher than the ELVs that would otherwise apply to gas oil-fired engines under the MCPD. In the absence of the limited-hours exemption, the generators would therefore need to comply with the applicable MCPD ELVs.

We are satisfied that the removal of these ELVs does not represent backsliding. Although the variation removes emission limits previously included within the permit, this is accompanied by a change in the permitted operating envelope such that the generators qualify for the limited-hours exemption under Article 6(3) of the MCPD. Having assessed the proposed operating regime and the updated environmental assessments submitted in support of the variation, we are satisfied that operation of the generators will not result in significant adverse effects at ecological or residential receptors. The removal of the ELVs therefore does not result in a reduction in the level of environmental protection provided by the permit.

We do not consider SO₂ emissions to be a risk from the operation of the installation as we have included a condition in the permit restricting the fuel to ultra-low sulphur gas oil, resulting in negligible emissions of sulphur. Consequently, no ELVs or monitoring requirements have been set for SO₂

We also do not consider particulate emissions to pose a significant risk. The generators are standby plant with restricted operating hours and particulate emissions are expected to be low. Our assessment of the air quality modelling indicates that particulate matter emissions would not give rise to significant effects at ecological or human receptors. We are satisfied that particulate emissions will be adequately controlled through the fuel specification, engine design, preventative maintenance and operational restrictions included within the

permit. Consequently, neither an ELV nor a monitoring requirement has been set for particulate matter.

We made these decisions in accordance with the Medium Combustion Plant Directive (MCPD).

Monitoring

For the MCPs at the installation, we have decided that monitoring should be set for the following parameters, using the methods detailed and to the frequencies specified:

- oxides of nitrogen;
- carbon monoxide.

These monitoring requirements have been set in accordance with the MCPD and to provide assurance that emissions from the installation remain appropriately controlled.

The monitoring requirements have been differentiated according to plant size, environmental risk and the requirements of the MCPD:

We have not set monitoring requirements for the combustion plant with a thermal input of less than 1 MWth added by this variation. This plant is not MCP, and we consider that monitoring would be disproportionate given its size and associated environmental risk. We are satisfied that emissions from this plant will be adequately controlled through the design and operation of the equipment and through the Environmental Management System (EMS) implemented at the installation.

We have specified monitoring of emissions of carbon monoxide (CO) for the new MCPs, other than the EDGs and UDGs, with a minimum frequency of once every 1,500 hours of operation or every five years (whichever comes first). This monitoring has been included in the permit in order to comply with the requirements of the MCPD, which specifies the minimum requirements for monitoring of carbon monoxide emissions for limited operating hour MCPs.

We have also specified monitoring of emissions of nitrogen oxides (NO_x) for the new MCPs, other than the EDGs and UDGs, with the same frequency specified for the monitoring of CO emissions. In setting this requirement, we have applied our regulatory discretion, as we consider that this limited monitoring, undertaken concurrently with carbon monoxide monitoring, is proportionate to the risk associated with emissions of NO_x from the installation.

For the new MCPs, other than the EDGs and UDGs, we have determined that monitoring may be undertaken in accordance with the web guide *Monitoring*

stack emissions: low risk MCPs and specified generators (published 20 January 2026, formerly TGN M5). Taking account of the limited annual operating hours of these engines and the fact that no ELVs have been set for NOx or carbon monoxide, we consider this approach to be proportionate.

For the EDGs and UDGs, we have retained the existing requirement for annual periodic emissions monitoring. Although these generators are now subject to a restriction limiting operation to no more than 500 hours per year and would be eligible for less frequent monitoring under the MCPD, they remain the largest MCPs at the installation and therefore have the greatest potential environmental impact.

We do not consider it appropriate to require the operation of emergency standby plant solely to meet monitoring requirements. Monitoring should therefore, where practicable, be aligned with planned generator testing and maintenance activities. Condition 3.5.1 allows an alternative monitoring frequency to be agreed in writing with the Environment Agency. The Operator may therefore submit a proposed alternative monitoring schedule, supported by an appropriate justification, before the annual monitoring requirement takes effect.

This approach retains annual monitoring as the default permit requirement whilst providing sufficient flexibility to avoid unnecessary generator operation and associated emissions.

In addition to retaining annual monitoring, we consider it appropriate to retain the requirement for monitoring to be undertaken using MCERTS accredited personnel, equipment and methods. Based on the information in the application, we are satisfied that the Operator's techniques, personnel and equipment have either MCERTS certification or MCERTS accreditation, as appropriate.

The monitoring requirements therefore differentiate between the larger EDGs and UDGs, for which annual monitoring has been retained subject to the flexibility provided by condition 3.5.1, and the smaller MCPs added by this variation, for which the MCPD minimum monitoring frequency has been applied.

For all MCPs, we have set a requirement for the first monitoring to be undertaken within four months of the issue date of the permit or the date on which the MCP is first put into operation, whichever is later (permit condition 3.5.5).

Reporting

We have specified reporting in the permit to ensure that the installation is being operated in line with that specified in the operating techniques and to ensure that we are notified immediately in the instance that the site ever operates in emergency scenario mode.

All the electricity generated from loaded test runs will be exported to the grid together with that generated by the reactor. Electricity exported from the installation is required to be reported under Schedule 4 of the permit. However, due to the relatively small quantity of electricity generated by the emergency generators, electricity generated by individual generators will not be measured or reported separately. Elective operation of the emergency generators to provide balancing services or demand side response services is not permitted.

Management system

We are not aware of any reason to consider that the operator will not have the management system to enable them to comply with the permit conditions.

The decision was taken in accordance with the guidance on operator competence and how to develop a management system for environmental permits.

The Operator confirmed they are preparing an overarching Environmental Management System (EMS) for the operation of the HPC Site, which will be ISO 14001 accredited.

Growth duty

We have considered our duty to have regard to the desirability of promoting economic growth set out in section 108(1) of the Deregulation Act 2015 and the guidance issued under section 110 of that Act in deciding whether to grant this permit variation.

Paragraph 1.3 of the guidance says:

“The primary role of regulators, in delivering regulation, is to achieve the regulatory outcomes for which they are responsible. For a number of regulators, these regulatory outcomes include an explicit reference to development or growth. The growth duty establishes economic growth as a factor that all specified regulators should have regard to, alongside the delivery of the protections set out in the relevant legislation.”

We have addressed the legislative requirements and environmental standards to be set for this operation in the body of the decision document above. The guidance is clear at paragraph 1.5 that the growth duty does not legitimise non-compliance and its purpose is not to achieve or pursue economic growth at the expense of necessary protections.

We consider the requirements and standards we have set in this permit are reasonable and necessary to avoid a risk of an unacceptable level of pollution. This also promotes growth amongst legitimate operators because the standards

applied to the operator are consistent across businesses in this sector and have been set to achieve the required legislative standards.

Consultation Responses

The following summarises the responses to consultation with other organisations, our notice on GOV.UK for the public, newspaper advertising and the way in which we have considered these in the determination process.

Consultation Responses from Statutory and Non-Statutory Bodies

Response Received from UKHSA	
Brief summary of issues raised:	Summary of action taken / how this has been covered
The main emissions of potential concern are nitrogen dioxide, carbon monoxide, sulphur dioxide and particulate matter from the proposed back-up generators. The Operator's air quality modelling indicates that concentrations will not exceed the relevant UK air quality objectives.	We have reviewed the Operator's air quality assessment and completed an audit of the modelling undertaken in support of the application. The assessment considered emissions of nitrogen dioxide, carbon monoxide, sulphur dioxide and particulate matter from the proposed generators and their potential effects on human health and the environment. Our assessment is set out in the Air Quality section of this decision document. We are satisfied that the modelling has been undertaken using appropriate assumptions and demonstrates that operation of the generators will not result in exceedances of the relevant air quality standards, significant pollution or significant adverse effects on human health or the environment. See the Key Issues section of this decision document for further details of our assessment.
It is noted that the use of the generators will be time-limited.	Following commissioning, the generators are intended for emergency and periodic testing purposes only. The permit limits all generators to no more than 500 operating hours per year and does not permit elective operation for balancing services or demand side response purposes. We are satisfied that the operating scenarios assessed reflect this operating regime.
Reducing public exposure to pollutants such as particulate matter and nitrogen dioxide can provide public health benefits. UKHSA supports approaches that minimise or mitigate public exposure to air pollutants.	We recognise that reducing public exposure to air pollutants can provide public health benefits. In determining this application, we assessed the potential impacts of emissions from the generators on human health and the environment, taking account of emissions of nitrogen dioxide, particulate matter and other relevant pollutants. The generators are standby plant that will operate only for emergency, commissioning and testing purposes, and the permit limits operation of all generators to no more than 500 hours per year. Based on the air quality

	assessment and our audit of the modelling, we are satisfied that operation of the generators will not result in significant adverse effects on human health or the environment. See the Air Quality section of this decision document for further details of our assessment.
Based on the information contained in the application, UKHSA has no significant concerns regarding the risk to the health of the local population from the installation.	We note UKHSA's conclusion that it has no significant concerns regarding risks to the health of the local population arising from the installation. No further action is required in response to this comment.

Response Received from Natural Resources Wales (NRW)	
Brief summary of issues raised:	Summary of action taken / how this has been covered
NRW and Natural England have a shared advisory role as Appropriate Nature Conservation Bodies (ANCBs) for the Severn Estuary SAC, SPA and Ramsar Site.	The Environment Agency consulted Natural Resources Wales (NRW) during the determination of the application. NRW advised that, in its role as an Appropriate Nature Conservation Body (ANCB), it was content to defer to Natural England's advice in relation to the Severn Estuary SAC, SPA and Ramsar site. The Environment Agency subsequently consulted Natural England on the Habitats Regulations Assessment (HRA) and Appendix 4 assessment. We are satisfied that the potential effects on the designated sites have been appropriately assessed. Given NRW's response and the conclusion that the predicted effects would not extend to the Welsh side of the estuary, we did not consider further consultation with NRW on these assessments to be necessary.
NRW welcomes the intention to assess potential impacts from aerial emissions on the features of the Severn Estuary SAC, SPA and Ramsar Site through the Habitats Regulations Assessment (HRA).	We undertook a Habitats Regulations Assessment (HRA) and supporting ecological assessments to consider the potential effects of emissions from the generators on the Severn Estuary SAC, SPA and Ramsar site and other relevant designated ecological sites. We are satisfied that operation of the generators will not adversely affect the integrity of these sites. Further details of the assessment and our conclusions are provided in the Key Issues section of this decision document.
NRW has no comments or information to inform the HRA in-combination assessment.	No further action required.

Response Received from Cardiff Council Planning department	
Brief summary of issues raised:	Summary of action taken / how this has been covered
Confirmed they have no comments in relation to the consultation on a variation of an environmental permit (EPR/ZP3238FH/V004) at Hinkley Point 'C' Power Station.	No action required.

Response Received from Office for Nuclear Regulation (ONR)	
Brief summary of issues raised:	Summary of action taken / how this has been covered
Confirmed no comments to add from an ONR perspective.	No action required.

Consultation Responses from Members of the Public and Community Organisations

- a) Representations from Local MP, Assembly Member (AM), Councillors and Parish / Town / Community Councils

Response Received from Yate Town Council	
Brief summary of issues raised:	Summary of action taken / how this has been covered
Operation of the generators be restricted to genuine back-up, commissioning, testing, emergency and other essential safety-related purposes.	The permit restricts the operation of the generators to the provision of electricity to Hinkley Point C in the event of a failure of supply from the National Grid and for commissioning, maintenance and routine testing purposes. Electricity may only be exported to the National Grid when the generators are operated for commissioning, routine testing or maintenance testing. The permit does not allow elective operation of the generators to provide balancing services, demand side response services or any other form of commercial electricity generation. We are therefore satisfied that the generators will only be operated for emergency, safety-related and other essential operational purposes.
The permit should include strict and enforceable controls on generator operation, emissions, monitoring, record keeping and public transparency.	We are satisfied that the permit includes enforceable conditions relating to generator operation, monitoring, reporting and record keeping. The permit restricts the operation of the generators to emergency use, commissioning,

	maintenance and routine testing activities, and limits operation to no more than 500 hours per year. The permit also includes monitoring, reporting and record keeping requirements appropriate to the size, operating regime and environmental risk associated with the different categories of combustion plant. Compliance with these requirements is regulated by the Environment Agency. Information reported under the permit, including monitoring data where required, may be placed on the public register subject to any legal restrictions on disclosure. We are satisfied that the permit contains appropriate controls to protect human health and the environment.
A precautionary approach should be taken to protect the Severn Estuary designated sites from impacts associated with NOx emissions, nitrogen deposition, acid deposition and particulate matter.	We assessed the potential impacts of emissions from the proposed generators on designated ecological sites, including impacts from NOx, nitrogen deposition, acid deposition and particulate matter. The assessment used conservative assumptions intended to represent reasonable worst-case operating conditions and included scenarios involving the concurrent operation of multiple generators. We are satisfied that the assessment is suitably precautionary and that operation of the proposed generators will not result in significant adverse effects on designated ecological sites.

b) Representations from Individual Members of the Public

12 responses were received from members of the public. A number of the issues raised were the same as those considered above. Where an issue has already been covered above it is not necessarily repeated below. Where multiple representations raised the same or substantially similar issues, they have been grouped together and considered collectively.

Brief summary of issues raised:	Environment Agency comment
Comments about air emissions and air risk assessment	
Concerns were raised regarding emissions to air from the generators and the need for monitoring and enforceable emission controls.	We have assessed emissions from the proposed generators as part of this permit determination and are satisfied that the permit contains appropriate conditions to ensure the installation is operated in accordance with the requirements of the Environmental Permitting Regulations. The permit requires the Operator to operate the installation using the approved operating techniques and includes operating restrictions, monitoring, reporting and record keeping requirements where these are considered necessary and proportionate. Compliance with the permit conditions will be

	regulated by the Environment Agency. We are satisfied that the permit contains appropriate controls to protect human health and the environment.
Concerns raised about air quality impacts from generator emissions, including NO _x , particulate matter, SO ₂ , CO, VOCs and greenhouse gases.	We have assessed the potential impacts of emissions from the proposed generators on human health and the environment as part of this permit determination. The findings of that assessment are discussed in the main body of this decision document. Having reviewed the Applicant's assessment and undertaken an audit of the air quality modelling, we are satisfied that the operation of the proposed generators will not result in significant pollution or significant impacts on human health or the environment.
Concerns were raised regarding the assumptions used in the air quality assessment, including whether actual operating hours, load profiles, fuel use and commissioning durations may differ from those modelled, and whether the assessment adequately considered both worst-case and realistic operating scenarios, including concurrent operation of multiple generators.	The air quality assessment considered a range of operating scenarios, including commissioning, routine testing and emergency loss of off-site power events, and included the concurrent operation of multiple generators. The assessment used conservative assumptions intended to represent reasonable worst-case operating conditions. We reviewed the Applicant's assessment and undertook an audit of the air quality modelling, including the assumptions relating to operating profiles and generator operation. Additionally, the permit now restricts operation of all generators to no more than 500 hours per year. We are satisfied that the assessment appropriately considered the potential impacts of the proposed operating regime and demonstrates that operation of the generators will not result in significant adverse effects on human health or the environment. As the assessment demonstrates that impacts remain acceptable under reasonable worst-case operating conditions, further assessment of more realistic operating scenarios would not alter the conclusions of the determination.
Concerns were raised regarding the cumulative impacts of generator operation on human health and the environment.	The air quality assessment included scenarios involving the concurrent operation of multiple generators. The assessment used conservative assumptions intended to represent reasonable worst-case operating conditions. We reviewed the Applicant's assessment and undertook an audit of the air quality modelling. The findings of our assessment are discussed in the main body of this decision document. We are satisfied that operation of the generators will not result in significant impacts on human health or the environment.

Concerns were raised regarding cumulative emissions from the wider Hinkley Point C site and associated activities.	The Environment Agency assessed the potential impacts of emissions from the standby generators regulated by this permit. The air quality assessment also considered relevant cumulative contributions where these were applicable to the assessment, including emissions associated with ongoing construction activities that may overlap with generator commissioning. We reviewed the Applicant's assessment and undertook an audit of the air quality modelling. We are satisfied that the assessment appropriately considered cumulative air quality effects relevant to this permit variation and demonstrates that operation of the generators will not result in significant pollution or significant adverse effects on human health or the environment.
Comments were received requesting independent verification of the air quality modelling and assessment assumptions.	The air dispersion modelling and associated assessments were prepared by the Applicant and independently reviewed by Environment Agency specialists as part of the permit determination process. This included an audit of the modelling methodology, assumptions, input parameters and predicted impacts. The findings of our audit are discussed in the main body of this decision document. We are satisfied that the assessment is suitable for permit determination and demonstrates that operation of the proposed generators will not result in significant pollution or significant adverse effects on human health or the environment.
Comments were received requesting restrictions on generator operation during poor dispersion conditions, pollution episodes and other periods when emissions may be more likely to affect sensitive receptors.	The Operator has confirmed that generator operation will seek to minimise air quality impacts where reasonably practicable, while maintaining the safety requirements of the site. Certain generator testing activities are required to be undertaken at prescribed intervals for nuclear safety reasons and cannot be routinely rescheduled to avoid periods of poor dispersion or elevated background pollution. We are satisfied that the air quality assessment considers reasonable worst-case operating scenarios and uses meteorological data representative of the range of conditions that may occur, including conditions that could give rise to elevated pollutant concentrations. Having reviewed the assessment and supporting modelling, we are satisfied that operation of the proposed generators will not result in significant pollution or significant adverse effects on human health or the environment.

Comments were received requesting public disclosure of modelling assumptions, stack parameters, emission factors, operating profiles and assessment uncertainties.	The air quality assessment, including the air dispersion modelling report and supporting information, was made available during the consultation and remains available on the public register. We audited the Applicant's air quality assessment and considered the assumptions used within the modelling. This included review of the modelling parameters, meteorological data and other key inputs used to represent conditions at the site. We also considered the uncertainties inherent in air dispersion modelling as part of our determination. The findings of our audit are discussed in the main body of this decision document. We are satisfied that the assessment is suitable for permit determination and that emissions from the proposed generators will not result in significant adverse effects on human health or the environment.
Comments about health impacts	
Comments were received expressing concern about potential health impacts associated with the wider Hinkley Point C development, including leukaemia.	The comments appear to relate primarily to concerns regarding potential health effects associated with the wider Hinkley Point C development and the operation of a nuclear power station, rather than the back-up generators that are the subject of this permit variation. The wider development is outside the scope of this permit determination. As part of this determination, we assessed the potential impacts of emissions from the proposed generators on human health and the environment. Having reviewed the Applicant's assessment and undertaken an audit of the supporting air quality modelling, we are satisfied that operation of the generators will not result in significant pollution or significant adverse effects on human health or the environment.
Comments about impacts at ecological sites	
Concerns were raised regarding the potential effects of generator emissions on nearby designated ecological sites, including the Severn Estuary and Bridgwater Bay, from NO_x, nitrogen deposition, acid deposition and particulate matter.	We assessed the potential effects of emissions from the proposed generators on designated ecological sites, including the Severn Estuary SAC, SPA and Ramsar site and Bridgwater Bay SSSI. The assessment considered the effects of oxides of nitrogen (NO_x), nitrogen deposition, acid deposition and particulate matter on relevant ecological receptors. The assessment is described in the main body of this decision document. We are satisfied that operation of the proposed generators will not result in significant adverse effects on designated ecological sites.

Concerns were raised regarding the location of the wider HPC development in relation to designated sites and the potential impact of further construction on the countryside.	Decisions regarding the location of the wider Hinkley Point C development, including the siting of the power station and associated infrastructure, and the effects of the wider construction project on the surrounding countryside relate to matters that were considered through separate planning and regulatory processes. This permit determination is limited to the proposed variation for back-up generators and associated combustion plant. The Environment Agency has assessed the environmental impacts arising from operation of those generators, including impacts on nearby communities and sensitive environmental receptors, as part of this permit determination.
Concerns were raised regarding contamination of the marine environment.	The comments appear to relate primarily to potential impacts on the marine environment associated with the wider Hinkley Point C development rather than the back-up generators that are the subject of this permit variation. This permit variation relates only to the proposed back-up generators and associated combustion plant. Discharges to water are regulated separately and do not form part of this permit. We have assessed the potential impacts arising from operation of the generators and are satisfied that operation of the proposed generators will not result in significant pollution or significant adverse effects on the environment.
Comments were received requesting ecological review, corrective action or operational restrictions if emissions exceed modelled predictions or monitoring identifies adverse ecological effects.	We are satisfied that the permit contains appropriate controls to protect designated ecological sites and other environmental receptors. The permit includes monitoring, reporting and record keeping requirements where these are considered necessary and proportionate. We consider that the Operator will be able to comply with the permit conditions. If future information indicates that operation of the installation is causing pollution or is having an adverse effect on the environment, the Environment Agency has powers to review the permit and take appropriate regulatory action where necessary. The Environment Agency may also take enforcement action where permit requirements are not complied with.
Comments about BAT, emission limits and control measures	
Comments were received questioning the need for the proposed back-up generators.	The need for back-up generation forms part of the Operator's proposed design for the Hinkley Point C development. This permit determination does not consider the wider need for the development or the role of the generators within that design. Instead, the

	Environment Agency's role is to determine whether the proposed installation meets the requirements of the Environmental Permitting (England and Wales) Regulations and can be operated without causing significant pollution or significant adverse effects on human health or the environment. Having completed that assessment, we are satisfied that the requirements of the Environmental Permitting Regulations have been met.
Comments were received expressing the view that ensuring nuclear safety should take precedence over pollution prevention requirements for the back-up generators.	The proposed generators have an important safety function within the Hinkley Point C design. In determining this application, we considered the environmental impacts of the proposed generators, together with the Applicant's BAT assessment and information regarding the intended operational role of the plant. We are satisfied that the proposed configuration represents BAT for this installation and can be operated in compliance with the requirements of the Environmental Permitting Regulations without causing significant pollution or significant adverse effects on human health or the environment.
Comments were received questioning whether the proposed diesel generator configuration represents BAT, including whether lower-emission alternatives such as battery storage or other technologies could be used whilst maintaining safety and resilience.	Fast start-up is a fundamental requirement of the emergency power system, as it is necessary to restore power to essential safety systems immediately following a loss of off-site power. Diesel generators are a proven and highly reliable technology that can be started from cold within a very short period of time and are widely used to provide emergency power supplies for pressurised water reactors worldwide. We considered the BAT assessment submitted by the Operator, together with the operational requirements of the installation and the safety role of the generators. Having considered the information provided, we are satisfied that the proposed generator configuration represents BAT for this installation. In reaching this conclusion, we have taken account of the need for a proven, reliable and rapidly available emergency power supply.
Concerns were raised regarding generator operating hours, testing frequency and operation outside back-up, commissioning, emergency, safety or essential testing purposes.	The role of the emergency back-up diesel generators is to provide electrical power supply to the Key Safety Classified Systems of the nuclear power station in the event of a Loss of Off-site Power (LOOP) event, enabling the station to achieve and maintain a safe shutdown state. Failure of the emergency back-up diesel generators to perform this safety-critical role therefore has the potential to result in a nuclear incident.

	The actual operation of the generators will be minimised as far as possible whilst ensuring that they remain fit for their intended safety purpose. The permit restricts operation of all generators to emergency use, commissioning, maintenance and routine testing activities and limits operation to no more than 500 hours per year. We are satisfied that these controls appropriately limit generator operation whilst ensuring that the generators remain available to fulfil their intended safety function.
Comments were received requesting controls on generator operating hours and the circumstances in which the generators may be operated, including emergency operation, commissioning, testing and maintenance activities, and abnormal operation.	The permit and supporting assessments take account of emergency operating scenarios, which represent the principal non-routine operating mode for the generators. The permit also includes a condition restricting the operation of all generators to no more than 500 hours per year (condition 2.3.6). The generators are intended to operate for emergency use, commissioning, maintenance and routine testing activities only. The air quality assessment considered a range of operating scenarios, including emergency loss of off-site power events and commissioning activities. Having reviewed the Applicant's assessment and undertaken an audit of the supporting modelling, we are satisfied that the permit contains appropriate controls on generator operation and that operation of the generators will not result in significant pollution or significant adverse effects on human health or the environment.
Concerns were raised regarding operation of the generators for routine or non-essential purposes such as commercial operation.	The permit restricts the operation of the generators to the provision of electricity to Hinkley Point C in the event of a failure of supply from the National Grid and for commissioning and maintenance testing purposes. The permit also limits operation of all generators to no more than 500 hours per year. Electricity may only be exported to the National Grid when the generators are operated for routine testing, maintenance testing or commissioning. The permit does not allow elective operation of the generators to provide balancing services, demand side response services or any other form of commercial electricity generation.
Comments about noise impacts	
Concerns were raised regarding potential noise impacts from generator commissioning, testing and operation, including cumulative impacts where multiple generators operate simultaneously, the timing of testing activities and	We assessed the potential noise impacts associated with commissioning, testing and operation of the proposed generators as part of this permit variation determination. The assessment submitted by the Operator considered ecological and residential receptors and included a worst-case scenario

potential effects on human and ecological receptors.	assuming all generators operate simultaneously and continuously during a loss of off-site power event. We are satisfied that operation of the proposed generators will not result in significant adverse effects at the ecological or residential sensitive receptors.
Concern over noise impacts during construction.	Impacts from noise during the construction phase are not considered as part of this environmental permitting decision. Such impacts may be considered and controlled through planning and other regulatory processes. Construction phase combustion plant at Hinkley Point C is regulated under a separate environmental permit. The remit of this permit determination is to consider the potential impacts arising from operation of the generators covered by this permit, including commissioning and testing activities, which we have assessed as part of our determination.
Comments were received requesting controls on noise emissions, including monitoring, complaint investigation and corrective action where necessary.	We have assessed noise from the installation and are satisfied that it will not result in significant adverse effects on residential or ecological receptors. Permit conditions 3.4.1 and 3.4.2 will ensure that noise is controlled and will allow us to take further action should it be required.
Comments about accident prevention and safety	
Comments were received requesting that back-up generators be protected against extreme flooding and other external hazards to ensure they remain available when required.	As noted in the original permit determination, flood risk and site location were considered through the planning process and flooding and other external hazards form part of the nuclear site safety case considered by the Office for Nuclear Regulation (ONR). This permit determination considers the environmental impacts arising from operation of the generators and whether the requirements of the Environmental Permitting Regulations are met. We are satisfied that the proposed generators can be operated without causing significant pollution or significant adverse effects on human health or the environment.
Concerns were raised regarding site security including terrorism risks and sabotage.	Having considered the information submitted with the application, we are satisfied that appropriate infrastructure, procedures and management systems will be in place to ensure that the installation can be operated safely and securely and in accordance with the requirements of the Environmental Permitting Regulations. The Operator confirms that the emergency situations that may arise during the operation

	of the combustion plant will be considered within the Environmental Management System (EMS). The EMS will include relevant Environmental Emergency Plans, which provide written instructions and information to use during an emergency. These plans will also provide information to prevent or mitigate environmental impacts and health and safety risks. Consideration of terrorism and other malicious acts is also addressed through other regulatory and security arrangements applicable to the site, outside this permit determination.
Comments about pollution prevention and other local impacts	
Concerns were raised regarding the storage and handling of fuels, lubricants and other potentially polluting substances, including the risk of spills or contaminated runoff affecting land, watercourses and designated habitats.	We assessed the risks associated with the storage and handling of fuels, lubricants and other potentially polluting substances as part of this permit determination. We considered the proposed fuel storage arrangements, containment infrastructure, drainage arrangements and pollution prevention measures, together with the relevant operating techniques and management systems described in the application. We are satisfied that appropriate measures will be in place to prevent or minimise the risk of spills, leaks and contaminated runoff. We are also satisfied that operation of the proposed generators will not result in significant pollution of land, groundwater, surface waters or designated habitats. Further details of our assessment are provided in the main body of this decision document.
Concerns were raised regarding traffic, vehicle movements, congestion, road condition and local disruption associated with the wider HPC development and any additional generator works.	Construction phase impacts, including traffic movements, congestion, road condition and local disruption, are not considered as part of this environmental permitting decision and may be considered and controlled through planning and other regulatory processes. However, we do not consider that the inclusion of the additional generators in this permit would materially alter construction traffic associated with the Hinkley Point C development. This permit variation relates to the operation of back-up generators and associated combustion plant. The purpose of this permit determination is to assess the environmental impacts arising from operation of that plant, which we have considered as part of our determination.

Concerns were raised regarding light impacts from the site on nearby housing and wildlife.	Pollution from light is primarily a matter for the planning process, where visual and amenity impacts are considered. It has not been considered as part of this permit determination, which relates to the operation of the proposed back-up generators and associated combustion plant only.
Comments about regulation	
Comments were received requesting monitoring, record keeping, reporting and public transparency relating to generator operation and environmental performance.	The permit includes requirements for monitoring, reporting and record keeping, appropriate to the size, operating regime and environmental risk associated with the different categories of combustion plant. Compliance with these requirements is regulated by the Environment Agency. Information reported under the permit, including monitoring data where required, will be submitted to the Environment Agency and placed on the public register, subject to any legal restrictions on disclosure.
Comments were received requesting regulatory review where generator operation exceeds the assumptions used within the permit determination.	The Environment Agency assessed the environmental impacts of the generators using the operating scenarios described in the application and supporting assessments. The permit includes a condition restricting the operation of all generators to no more than 500 hours per year (condition 2.3.6). Any proposed change to the permitted activity, including changes to the operating regime that could affect the assumptions used in the assessment, may require a permit variation and further assessment before it can be implemented. We also keep permits under review and may take regulatory action where necessary to ensure compliance with permit conditions and the requirements of the Environmental Permitting Regulations.
Concerns were raised that successive permit variations could lead to incremental increases in environmental impact without adequate assessment of the cumulative effects of the overall development.	We have a statutory duty to determine the application submitted to us. Any proposed changes to the permitted activity must be assessed through the Environmental Permitting regime and, where necessary, require a permit variation before they can be implemented. The Environment Agency assesses each application on a case-by-case basis, with the level of assessment proportionate to the scale and environmental risk of the proposed changes. Where relevant, this includes assessment of the environmental effects of the proposed changes in combination with the existing permitted activity and any other relevant cumulative effects. We would only grant a variation where we are satisfied that the

	requirements of the Environmental Permitting Regulations continue to be met and that the proposed changes would not result in significant pollution or significant impacts on human health or the environment.
Comments were received requesting periodic review of the permit to ensure it remains protective as site operations and environmental conditions change.	The Environment Agency periodically reviews permits where required by changes in legislation, regulatory requirements or other relevant developments. Any proposed changes to the permitted activity may also require a permit variation and assessment before they can be implemented. Through these mechanisms, we can ensure that permits remain appropriate and continue to protect human health and the environment.
Comments about monitoring and reporting	
Comments were received regarding emissions monitoring, including how emissions will be monitored and whether monitoring will be continuous or otherwise sufficiently frequent.	Continuous emissions monitoring is not generally required for this type of intermittently operated, non-LCP combustion plant. The permit instead requires periodic emissions monitoring at frequencies appropriate to the size, operating regime and environmental risk associated with the different categories of combustion plant, as specified in Table S3.1 of the permit. We are satisfied that these monitoring requirements are appropriate for the nature and intended operation of the generators. Further details of the monitoring requirements and the reasons for the monitoring frequencies specified in the permit are provided in the Monitoring section of this decision document.
Comments were received requesting monitoring, record keeping and reporting of generator operation, fuel use, emissions performance, maintenance and environmental performance.	The permit includes requirements for monitoring, reporting and record keeping relating to both emissions and generator operation. Schedule 4 of the permit requires reporting of fuel usage, generator operating hours, testing and maintenance activities, emergency operation and electricity exported from the installation. The permit also includes periodic emissions monitoring requirements, as specified in Table S3.1. Compliance with these requirements is regulated by the Environment Agency. We are satisfied that the monitoring, reporting and record keeping requirements included in the permit are appropriate for the size, operating regime and environmental risk associated with the generators. Further details are provided in the Monitoring and Reporting sections of this decision document.
Comments were received regarding public availability of information relating to generator operation, emissions and environmental monitoring.	The permit includes requirements for emissions monitoring, reporting and record keeping. In addition, the permit requires the reporting of fuel usage, generator operation,

	testing and maintenance activities, emergency operation and electricity exported from the installation. Compliance with these requirements is regulated by the Environment Agency. Information reported under the permit, including monitoring data and notifications required under permit condition 4.3.1, may be placed on the public register subject to any legal restrictions on disclosure. We are satisfied that the permit contains appropriate provisions for public transparency and regulatory oversight.
Concerns about the Operator	
Comments were received questioning the Operator's ability to comply with future permit requirements in light of concerns regarding delivery of previous planning commitments.	Issues relating to planning conditions and planning obligations are matters for the relevant planning authorities and fall outside the scope of this permit determination. The Environment Agency has assessed this application against the requirements of the Environmental Permitting Regulations. We have considered the information submitted with the application and are satisfied that the Operator will be able to comply with the requirements of the permit. The Operator will be required to comply with the permit conditions, and the Environment Agency has a range of regulatory powers available to address non-compliance if required.
Comments about the consultation	
Comments were received questioning the consultation process and expressing the view that the consultation was a 'box-ticking exercise'.	The Environment Agency undertook public consultation on this application in accordance with its Public Participation Statement and the requirements applicable to substantial permit variations. Public consultation is an important part of the permit determination process and enables interested parties to provide information, evidence and views relevant to the application. In addition to the consultation requirements that normally apply to this type of application, further publicity was undertaken, including advertisements in local newspapers in both Somerset and South Wales. All representations received during the consultation period were reviewed and considered as part of the permit determination. The key issues raised through consultation, together with our responses, are summarised in this decision document. We have taken all relevant representations into account in reaching our decision.

c) Representations on issues that do not fall within the scope of this permit determination

Various issues were raised that fall outside the scope of this permit determination. Some of these have been addressed in the responses above. Others are summarised below.

A number of comments related to the wider Hinkley Point C development including the principle, need for and location of the power station, rather than the generators that are the subject of this permit variation. The Environment Agency's role in this determination is limited to assessing the environmental impacts of the activities regulated by this Environmental Permit. We have therefore only considered matters relevant to the operation of the generators and their associated environmental effects. Issues relating to the wider development, planning matters, national policy or other non-permitted activities have not been taken into account in our decision.

Comments were received regarding wider matters including Net Zero policy, national energy policy, energy costs, housing development, house prices, parking provision, road infrastructure, road safety, workforce levels, employment matters, security, wind turbines, solar farms, electric vehicles, the perceived need for development on farmland, community perceptions of the wider Hinkley Point C development, workforce morale and the wider economic and social impacts of the development. These matters are outside the scope of this permit determination and have not been taken into account in our decision.

Comments were received regarding planning matters associated with the wider Hinkley Point C development, including construction traffic, restoration of trees and vegetation, compliance with planning permissions, construction impacts on the countryside, lighting impacts and the location of the wider development. These matters are regulated through other regimes and have not been considered as part of this permit determination. We are unable to answer questions regarding the planning process as this does not fall within our remit. We are responsible only for determining the Environmental Permit application.