

NICKY LEAR: ENVIRONMENTAL MATTERS

PROOF OF EVIDENCE

1 SUMMARY AND CONCLUSIONS

- 1.1 My name is Nicky Lear and I am employed by Arcadis Consulting (UK) Ltd. I am a Technical Director and a Chartered Environmentalist (CEnv) with over 21 years' experience in Environmental Impact Assessment (EIA). I am a Full Member of the Institution of Environmental Sciences (MIEnvSc).
- 1.2 As the Arcadis Environment Lead on the Project, I am responsible for co-ordinating multi-disciplinary inputs from the Arcadis environmental specialist teams commissioned on the Project (ecology, arboriculture, air quality, soils, water resources and flood risk, mining and minerals and transport). Arcadis were instructed by National Grid Electricity Transmission plc (NGET) in January 2023 to provide ecology support to inform the cable route alignment. Following this, Arcadis' environmental specialists prepared the Ecological Impact Assessments, Biodiversity Net Gain Assessments, Arboricultural Impact Assessments, Construction Dust Assessments, Water Resources Assessments, Flood Risk Assessments, Transport Statement, Mining Risk and Minerals Impact Assessments and Agricultural Land Classification (ALC) and Landholding Assessment Reports for the Cable Sealing End Compound (CSEC) planning applications.
- 1.3 The purpose of the Project is to underground a section of 400kV overhead electricity transmission lines, to mitigate the visual impact of existing electricity infrastructure through part of the Cotswolds National Landscape. NGET has considered environmental impacts throughout development of the Project and has aimed to minimise construction and operational impacts through careful routeing and siting and replacement planting. Mitigation has been considered throughout the design process and has been embedded into the Project design.
- 1.4 The alignment of the cable route minimises effects on ecology and existing vegetation where possible, avoiding many areas of woodland and minimising breaks in existing field boundary hedgerows, whilst also minimising the number of Public Right of Way (PRoW) crossings. At Breakheart Plantation, the alignment of the route has been modified to minimise the corridor width as far as practicable to minimise tree loss and avoid a straight route through the woodland to minimise wider visual impacts and impacts to bats. The curved alignment favours bat foraging and minimises wind effects through the woodland. The Project team have also sought to avoid the highest value compartments of the woodland and locate the route away from veteran and ancient trees, whilst routeing the cable in areas where trees have been found with signs of ash dieback. The corridor has also been narrowed as far as possible where crossing woodland to the west of Warren Farm to minimise tree loss and ecology impacts, and has been located at one of the narrowest points of the open access land and common land between Cleeve Common and West Down.
- 1.5 Mitigation measures during construction are outlined in the Outline Construction Environmental Management Plan (CEMP), which will be developed by the Main Contractor once appointed by NGET into a final (detailed) CEMP. The final CEMP is secured through the planning conditions and will be submitted to the relevant Local Planning Authority for approval. All construction activities will be carried out in strict accordance with the detailed final CEMP which will detail the standard and quality of works to be undertaken. Compliance with the final CEMP will be monitored during construction.
- 1.6 Formal requests for an EIA screening opinion were made to Cotswold District Council and Tewkesbury Borough Council, under Regulation 6 (1) of the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (as amended). As some elements of the Project (such as the temporary line diversions) require consent under the Electricity Act 1989 a

formal request for an EIA screening opinion under Regulation 10 (1) of The Electricity Works (Environmental Impact Assessment) (England and Wales) Regulations 2017 was made to the Secretary of State. It was concluded that the Project will not be likely to have significant environmental effects having regard to its nature, size and location and is therefore considered not to be EIA development requiring the submission of an Environmental Statement.

- 1.7 A number of environmental assessments were undertaken and submitted to Cotswold District Council and Tewkesbury Borough Council as part of the CSEC planning application submissions, in line with the relevant legislation, planning policy and best practice guidance, including Ecological Impact Assessments, Biodiversity Net Gain Assessments, Arboricultural Impact Assessments, Construction Dust Assessments, Construction Noise Impact Assessments, Water Resources Assessments, Flood Risk Assessments, a Transport Statement, an Archaeological Statement, Mining Risk and Minerals Impact Assessments and ALC and Landholding Assessments.
- 1.8 Construction activities have the potential to affect ecological receptors without mitigation in place, however, the Ecological Impact Assessments (**CD B18, CD B19**) conclude that with mitigation measures in place, the works will result in no significant negative residual effects. Mitigation measures include pollution control measures (as outlined in the Outline CEMP (**CD B13**)), implementation of the Landscape and Ecological Management Plans (LEMPs) (**CD B14, CD B15**), a replanting and landscape strategy, pre-construction surveys and vegetation clearance under ecological supervision. Landscape and visual effects are covered in the evidence of Ms Rebecca Greatrix.
- 1.9 The majority of vegetation will be retained and protected during the works where required. Of the vegetation that requires to be removed or partially removed to facilitate the Project, the majority has been identified as low quality. The arboricultural team has worked closely with the engineering team to minimise vegetation loss as much as possible across the Project. In order to offset the impact to visual public amenity associated with trees and hedgerows, a replacement strategy is proposed. A net gain in biodiversity will be delivered. Although national and local policy states that 10% Biodiversity Net Gain (BNG) is required, the Cotswold Nature Recovery Plan states that 20% BNG should be achieved within the Cotswold National Landscape. NGET has therefore committed to achieve 20% BNG for the CSECs.
- 1.10 Activities such as excavation, ground works, cutting, construction and storage of materials, have the potential to result in fugitive dust emissions throughout the construction phase. Vehicle movements both on-site and on the local road network also have the potential to result in the re-suspension of dust from highway surfaces. The potential for impacts at sensitive locations depends significantly on local meteorology during the undertaking of dust generating activities, with the most significant effects likely to occur during dry and windy conditions. The potential for dust impacts also depends significantly on the distance between the dust generating activity and receptor location. Risk was predicted based on a worst-case scenario of works being undertaken at the edge of the site boundary, therefore, actual risk is likely to be lower than that predicted during the majority of the construction phase. The construction dust assessments (**CD B31, CD B32**) concluded that with the proposed mitigation measures implemented (as identified in the construction dust assessments and the Outline CEMP (**CD B13**)), the residual effect from all dust generating activities is assessed to be not significant.
- 1.11 For the northern CSEC site, the noisiest construction activities are calculated to be associated with construction of the temporary access road. For daytime works, potentially significant effects may occur within 128 m of the works, however, the closest noise sensitive receptors are Corndean Cottages 170 m away. For the southern CSEC site, the noisiest construction activities are calculated to be associated with construction of the CSEC itself. For daytime works, potentially significant effects may occur within 125 m of the works, however, the closest noise sensitive receptor is Wood Farm 440 m away. No significant adverse effects are therefore predicted for any construction activities associated with the CSECs.

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- 1.12 Vibration effects from the construction works were scoped out of the assessment. Potential sources of vibration from the works include construction traffic on access and haul roads, digging and drilling works. Vibration levels from these sources would be considered negligible at 30 m from the works. All site works are at least 70 m from vibration sensitive receptors.
- 1.13 The ALC grade of the land within the northern CSEC planning application boundary comprises predominantly Grade 3b land. Grade 3a land was identified in the areas used to support access for the CSEC and do not comprise a permanent loss of land. The total area of Grade 3a (Best and Most Versatile (BMV)) land required temporarily is 0.7 ha and the total area of Grade 3b land which would be permanently lost is 3.1 ha. The agricultural landholdings are used for arable production and grazing with minimal associated infrastructure. The requirements for access to two landholdings for farming activities is infrequent and as such the sensitivity is considered to be low. One land holding requires reasonably frequent access to the land therefore the resulting sensitivity is considered to be moderate. The construction of the northern CSEC would result in a permanent land take of 1.8ha from one landholding. The rest of the land within the northern CSEC planning application boundary is only required temporarily as such the magnitude of impact is considered to be minor based on the area required and that there would not be any severance impacts. This would result in an overall slight impact for one landholding and neutral or slight impact for two landholdings which are all considered not significant.
- 1.14 The ALC grade of the land within the southern CSEC planning application boundary comprises Grade 3b across the entirety of the site which comprises a total of 1.9 ha of agricultural land. The permanent land loss is entirely non-BMV land. As two landholdings are used for sheep grazing there is limited associated infrastructure and access requirements are infrequent; therefore, the sensitivity is low. One landholding is used for both grazing and arable cropping and also has minimal associated infrastructure. However, there is a private water supply located within the site boundary. As such, the severance of this from the rest of the landholding will be investigated to ensure there is no long-term loss of this facility (in discussion with the landowner). The sensitivity of this landholding is therefore considered to be moderate. The Project would result in permanent land take of 3.3ha from one landholding. The rest of the land within the CSEC site boundary is only required temporarily; as such the magnitude of impact is considered to be minor based on the extent of land take and the replacement of the private water supply such that there are no permanent severance impacts. The overall impact on agricultural landholdings is slight and this is considered to be not significant.
- 1.15 The potential impacts of the Project on surface and groundwater receptors in the context of the baseline water environment was assessed. Following consideration of embedded design measures and implementation of good practice measures for both the construction and operational phases, the assessment determined that construction of the Project would result in no adverse impacts to the baseline water environment.
- 1.16 In relation to flood risk, the turning area at the CSECs and the permanent access/bellmouths are the only works that would result in a permanent increase in impermeable land area. Any new permanent land take at the CSECs would be drained in accordance with the planning policy requirements/local Sustainable Urban Drainage systems (SuDS) guidance of the Lead Local Flood Authority. All other sources of flooding assessed (fluvial, surface water and groundwater) are considered to pose a low risk to the Project. It is considered that, subject to the implementation of appropriate surface water management measures, the flood risk to the Project would be acceptable and the Project would not increase third party flood risk, thus satisfying the Exception Test in line with the National Planning Policy Framework requirement.
- 1.17 There were found to be no significant impacts to mineral resources within the planning application boundaries. Due to the CSEC sites being in a Mineral Consultation Area and a primary mineral resource area, approval from the Local Planning Authorities on the mineral resources assessment was required as part of the planning application process. The potential for made ground to be
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encountered during excavations within the northern CSEC site was identified and the Wood Farm BritPit was identified to encroach within the southern CSEC site. No ground investigation data exists for this area and therefore, the potential constraints provided by this feature such as ground stability around the pit as well as the type of backfill material will be considered during detailed design.

- 1.18 In relation to construction phase impacts on archaeology, further evaluation trenches have been undertaken following preparation of the Archaeological Statement, to further inform the likely impacts of the Project and the pre-commencement or construction phase mitigation measures required, for agreement with Gloucestershire County Council Archaeology Service and Historic England. The highest risk areas that will need strip, map and record or an archaeological watching brief are to be identified. Construction phase impacts on built heritage will be temporary, related to visual impacts, and would not be considered likely to have a significant impact on built heritage assets.
- 1.19 The main traffic and transport related environmental effects would occur during the peak construction period in 2028. The assessment of the future 2028 baseline and traffic generated during construction identified that for the majority of roads, under a worst-case scenario, the increase in traffic on those roads that form the proposed construction routes would be below the thresholds at which effects on highway links are to be assessed as recommended by best practice guidance. For those below the threshold, the level of traffic generation during the construction of the Project would not have a material impact on the road network and the effects are considered unlikely to be significant. The predicted increase for 12-hour Heavy Goods Vehicle flows (between 07:00-19:00 hours) was found to exceed the threshold for sensitive roads on the B4075, the A44 and A424. The increase in traffic will be limited for the duration of the construction phase and was assessed to be a maximum of a 1.1% increase in total traffic from the baseline traffic on the B4075, a 3.3% increase from baseline on the A44 and a 5.2 % increase from baseline on the A424. Furthermore, appropriate control measures are proposed to reduce adverse effects from traffic associated with the Project, as such, the assessment determined that the predicted effects associated with construction traffic on the assessed links are unlikely to be significant.
- 1.20 In conclusion, the environmental assessment findings demonstrate that environmental effects can be appropriately managed through implementation of best practicable means, the mitigation measures identified and implementation of the final CEMP. The Project can therefore be delivered in compliance with environmental legislation and planning conditions whilst minimising environmental impacts.

2 WITNESS DECLARATION

- 2.1 I confirm that the evidence prepared for this Inquiry and contained within this statement of evidence are my true and professional opinions. I confirm that I have understood and complied with my duty to the Inquiry as an Expert Witness and have provided my evidence impartially and objectively. I confirm that I have no conflicts of interest.
- 2.2 I confirm that artificial intelligence has not been used to produce this statement of evidence.



NICKY LEAR

13 October 2025

