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Tees CCPP Project

The Tees Combined Cycle Power Plant Project
Land at the Wilton International Site, Teesside

Volume 1 - Chapter 16

Regulations – 6(1)(b) and 8(1)

Applicant: Sembcorp Utilities UK
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16.1 INTRODUCTION

16.1 Cumulative effects may result from the combined effects of the Project with those from other projects and plans. The consideration of cumulative effects is important as the effects of the Project in isolation may not be significant but when combined with other projects they may be. Cumulative effects have been considered and where appropriate assessed under all the subject areas considered in the EIA following the methodology set out in *Chapter 3, Section 3.6.5*.

16.2 As explained in *Section 3.6.6*, there is no scope for significant indirect effects from the Project.

16.3 *Table 3.4* within *Chapter 3* lists those receptors potentially vulnerable to cumulative effects and *Table 3.5* describes the Project's area of influence by impact type. Other plans and projects screened into the cumulative assessment are described in *Table 3.6*, which also sets out the potential cumulative effect each planned or proposed project could have with the Project. Their approximate location is shown on *Figure 3.5*. The detailed assessments of cumulative effects are presented for each technical topic in *Chapters 6 to 15* and summaries are provided by subject area in the following sections.

16.2 GEOLOGY, HYDROGEOLOGY AND CONTAMINATION

16.2.1 *Geology and Land Contamination*

16.4 Cumulative geology and land contamination impacts have been scoped out on the basis that all ground condition and contamination impacts would be confined to the Project Site and there would be no requirement for off-site soil disposal.

16.2.2 *Water and Drainage*

16.5 The Project will be constructed on the site of a former power station, utilising the existing water supply and drainage networks that are present within the Wilton International Site. As such, the Wilton International Site can be considered to be a simple hydrological network, with a single shared input and shared output. Therefore, no cumulative effects on water drainage are considered probable.

16.6 With regards to cumulative effects on water availability, the project will use hybrid water cooling which does not require significant abstraction volumes to operate. The water supply to the Project will be provided by Northumbrian Water and the availability of water will be regulated by the terms of the water

supply agreement between Sembcorp and Northumbrian Water. In terms of water supply, no cumulative effects on other water users are anticipated.

16.7 With regards to cumulative effects on water quality, the discharge of waste water from the site will be via the Wilton International Site surface water drainage system. This discharge is monitored on site and operated under an existing environmental permit. When granting an environmental permit, the EA considers the other permitted activities in the locality to ensure that, in combination, these activities will not have an unacceptable cumulative effect. As the Project will be operated under the requirements of an Environmental Permit, it is anticipated that there will be no cumulative effects on water quality.

16.3 *AIR QUALITY*

16.8 A review has been undertaken of existing and proposed projects in the area that may contribute to operational phase cumulative impacts on air quality for sensitive human and ecological receptors.

16.9 No significant cumulative effects on human receptors were identified for both operation and construction phases. Two cumulative schemes were identified in the scoping process as having the potential to have cumulative effects with the Project on ecological receptors during construction. These are summarised within *Section 16.5*.

16.4 *NOISE AND VIBRATION*

16.10 No receptors have been identified which would experience cumulative noise and vibration effects with other planned and proposed projects.

16.5 *ECOLOGY AND NATURE CONSERVATION*

16.11 Cumulative effects relating to ecology and nature conservation have been assessed in relation to the list of plans and projects detailed in *Chapter 3* of the ES.

16.12 Two cumulative schemes, on the same site (R/2016/0418/FFM for retention as built of the CSG Wilton facility as a hazardous waste transfer and treatment site and R/2015/0682/FFM for provision of oil refinery at Wilton Waste Treatment Plant) were identified in the scoping process as having the potential to have cumulative effects with the Project on ecological receptors during construction. However these are assessed as unlikely to have disturbance effects and no significant cumulative effects are predicted.

16.13 The contributions of the Project to cumulative effects on protected areas from air pollutants during operation are insignificant (see also *Annex H Habitats Regulations Assessment*).

16.6 *TRAFFIC AND TRANSPORT*

16.14 Thirty-five development sites have been identified and four have been classed as having the potential to contribute to cumulative effects of the Project during construction. Three of the development sites are residential developments and have therefore been allowed for by applying a TEMPro growth factor to the baseline traffic flows based on the travel forecasts from the National Trip End Model (NTEM) dataset, and the fourth is the construction of a PET chemical plant, which could have a temporary impact during its construction period. Sembcorp will seek to coordinate with the proponent of this scheme prior to the start of construction to minimise the risk of cumulative effects arising from construction traffic and this will be a requirement of the CTMP.

16.7 *LANDSCAPE AND VISUAL AMENITY*

16.15 During scoping a number of other planned projects were identified as having the potential for cumulative landscape and visual effects with the Project.

16.16 The only viewpoint where the Project will be clearly seen in conjunction with other planned and proposed developments is VP10 Eston Nab looking north. This is a long distance view providing panoramic views of the Wilton International Site. Sensitivity is considered to be high. The magnitude of change is considered to be small resulting in a minor to moderate cumulative effect.

16.8 *ARCHAEOLOGY AND CULTURAL HERITAGE*

16.17 The landscape and visual impact assessment undertook further consideration of other planned and proposed developments in order to assess potential cumulative effects. The overall conclusion was that with one exception there would be no significant cumulative effects. The exception was Eston Nab Scheduled Monument where the cumulative magnitude of change was assessed to be small and the overall effect on the setting of the feature to be minor but not significant.

16.9 *HEALTH*

16.18 The baseline conditions in the vicinity of the Project are well below air quality standards, and the point of greatest impacts for the annual mean and 1 hour mean, will not be co-incident with the greatest impacts from the other projects identified. In terms of potential impacts arising from the emission of pollutants to atmosphere on human health, the cumulative impacts would not

result in air quality standards being exceeded and therefore there are no significant effects on human health.

16.19 In regards to noise and vibration, no receptors have been identified which would experience cumulative noise and vibration effects.