



Thurrock Flexible Generation Plant

**Environmental Statement Volume 4: Cumulative Environmental Assessment
Chapter 27: Climate Change**

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Environmental Impact Assessment

Cumulative Effects Assessment

Volume 4

Chapter 27

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1. Approach and Assessment of Effects

1.1 Purpose of this chapter

1.1.1 This chapter of the Environmental Statement (ES) provides an assessment of the impact on climate change due to greenhouse gas (GHG) emissions from the proposed development in combination with other relevant future development projects that have been scoped into the cumulative assessment.

1.2 Approach to cumulative assessment

1.2.1 As set out in the IEMA guidance (2017) discussed in Volume 3, Chapter 14: Climate Change, any project releasing (or reducing) GHG emissions has the potential in principle to result in adverse or beneficial effects on climate change that could be significant. This may include other consented or planned developments in the area around Thurrock Flexible Generation Plant or beyond, at any location.

1.2.2 This is because climate change is a global effect, not an effect that is localised in the area around any one individual development or group of developments, so all projects have the potential to contribute cumulatively to the effect.

1.2.3 For this reason, the sensitivity of the receptor (atmospheric GHG concentrations) was defined as **'high'** for the assessment in Chapter 14, for the purpose of taking into account the cumulative contribution to climate change of other projects and anthropogenic activities.

1.2.4 The type of effects and suitable measures to mitigate these from other developments would need to be dealt with for each other application as it comes forward, to ensure that the effects on climate change are reduced as far as possible.

1.3 Study area

1.3.1 As GHG impacts are global and cumulative with all other sources, no specific geographical study area is defined for this assessment.

1.4 Assessment of Effects

1.4.1 The significance of cumulative effects was assessed in Volume 3, Chapter 14: Climate Change by accounting for the cumulative contribution of all other global sources of GHG emissions in the defined 'high' sensitivity of the receptor.

1.4.2 Construction phase effects were assessed to be **negligible** and therefore not significant in EIA terms.

1.4.3 For the operational phase, the assessment considered changes to other GHG emission sources (i.e. in the future baseline of alternative electricity generation without the proposed development) and concluded that the net effect is **beneficial**, which is significant in EIA terms.

1.4.4 Following the design 35 year lifetime operational phase, were the facility to be decommissioned the effect would be **negligible**.

1.4.5 Were operation to continue without additional mitigation, the effect would be **adverse**, which is significant in EIA terms.

2. References

Institute of Environmental Management and Assessment (IEMA) (2017). Environmental Impact Assessment Guide to: Assessing Greenhouse Gas Emissions and Evaluating their Significance. [Online] available at: <https://www.iema.net/policy/ghg-in-eia-2017.pdf> [accessed 28 July 2017].