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## CHAPTER 10.0 SUMMARY OF EFFECTS

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## **10.0 SUMMARY OF EFFECTS**

### **10.1 Introduction**

- 10.1.1 This EIA Report ('EIAR') has been prepared on behalf of Lostock Sustainable Energy Plant Ltd (hereafter referred to as 'LSEP Ltd' or the 'Applicant') in support of an application (the 'Variation Application') to vary their existing consent under Section 36C ('s.36') of the Electricity Act 1989 (as amended) for the Lostock Sustainable Energy Plant ('LSEP'). The Variation Application contemporaneously seeks to vary the deemed planning permission ('DPP') direction under Section 90 of the Town and Country Planning Act 1990 (as amended). The LSEP, as consented, is referred to as the 'Consented Development'. The LSEP is located at Lostock Works, Griffiths Road, Northwich ('the LSEP site').
- 10.1.2 The Variation Application is for an increase in the annual waste fuel throughput of the LSEP. This would increase the consented 600,000 tonnes per annum ('tpa') of waste fuel to 728,000 tpa. The Variation Application also seeks to vary the consented HGV movements and waste delivery hours. These amendments are collectively referred to in the EIAR as 'the Proposal'.
- 10.1.3 Regulation 3 of The Electricity Generating Stations (Variation of Consents) (England and Wales) Regulations 2013 requires submission of an EIAR for variation applications where the development was originally subject to EIA. The original application for the LSEP was subject to EIA and an Environmental Statement ('ES') was submitted in support of the application (referred to as the 'May 2011 ES'). Accordingly, an EIAR has been prepared in support of the Variation Application.
- 10.1.4 When considering the environmental effects of the Proposal, the EIAR assess the consequential changes arising from the proposed variation (i.e. the baseline used for the assessment has been taken as the Consented Development).
- 10.1.5 The likely significant effects of the Proposal, as assessed and reported on in EIAR Chapters 4.0 to 9.0, are summarised below.

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## **10.2 Cumulative Impacts**

- 10.2.1 Chapter 2.0 of the EIAR outlines the approach to the cumulative assessment. Given that the proposed amendments are limited and defined, there are only a few environmental topics that would potentially be affected. Consequentially, the topics that could give rise to new cumulative effects are limited.
- 10.2.2 Accordingly, cumulative effects were assessed for Traffic and Transportation and Air Quality in the EIAR, although other Chapters have commented on these effects for completeness. The technical assessments found there to be no significant cumulative effects with the Proposal.

## **10.3 Traffic and Transportation**

- 10.3.1 Chapter 4.0 of the EIAR, together with the supporting Transport Assessment and figures, has been prepared to consider the highways and transport related environmental impact of the LSEP scheme with the Proposal, using a baseline incorporating the existing consent.
- 10.3.1 Changes in traffic flows that will result from the Proposal during the operational phase of the LSEP have been assessed against anticipated future road conditions. As there will be no change to the design or layout of the consented scheme, construction phase traffic flows have not been re-assessed as these will remain unchanged. The assessment finds that there will be a negligible or minor level of effect on all local road network link scenarios, and these have been determined as not significant in EIA terms.
- 10.3.2 The Chapter concludes that the Proposal will not result in a significant impact on operational or environmental conditions over the local transport network and there is no requirement for further off-site transport improvement / mitigation works (other than those already set out for the Consented Development).

## **10.4 Air Quality, Odour and Human Health**

- 10.4.1 Chapter 5.0 of the EIAR, together with the supporting figures and appendices, sets out an assessment of the likely significant effects of the Proposal upon air quality (including dust and human health) and odour.

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- 10.4.2 The impacts from the operational phase for both vehicle movements and the LSEP facility process emissions have been assessed. Impacts have been calculated for the total waste throughput of the scheme as now proposed (i.e. 728,000 tpa) rather than for only the proposed additional waste throughput (i.e. 128,000 tpa). In addition, a Human Health Risk Assessment has been carried out to determine the impact of pollutants on human health.
- 10.4.3 These assessments conclude that the significance of the impact of process emissions and road vehicles from the LSEP scheme (as now proposed with 728,000 tpa of waste throughput) will be negligible and not significant on human health.
- 10.4.1 The impacts from operational phase road and process emissions have also been determined at ecological receptors and the results compared to the Critical Levels and Critical Loads for the protection of local ecology. Critical Levels are the concentrations of pollutants in the atmosphere above which direct adverse effects on receptors (such as humans, plants, ecosystems) may occur. The Critical Load is the quantitative estimate of an exposure to one or more pollutants, below which significant harmful effects on specified sensitive elements of the environment are not expected to occur.
- 10.4.2 The assessment considered the significance of effects in the context of predicted changes to the LSEP scheme with the Proposal compared to the LSEP scheme as consented. In conclusion, the assessment found there to be no significant changes to the previously assessed conditions as a consequence of the Proposal. Furthermore, no likely significant effects are predicted for European or Ramsar Sites, and no significant harm is predicted for SSSIs or locally designated sites.
- 10.4.3 The impacts of dust and odour from the operational phase activities have been determined qualitatively in line with guidance from the IAQM. This has shown that the measures imbedded in the consented design of the LSEP are such to adequately control fugitive releases of dust and odour and the residual impact will be negligible and not significant.

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## **10.5 Noise and Vibration**

- 10.5.1 Chapter 6.0 of the EIAR, together with the supporting appendix, sets out an assessment of the likely significant effects of the Proposal upon operational noise and vibration.
- 10.5.2 The assessment looked at the noise impacts on existing residential areas from the proposed increase in vehicle movements during the daytime operation of the LSEP facility. The findings indicate that there will be no significant change in noise levels and that the effects will not be significant.
- 10.5.3 The assessment of impact in respect of the proposed additional vehicle movements within the LSEP site shows no significant increase in noise levels at nearest sensitive receptors during the daytime operational period. The site generated noise levels will remain within the agreed permissible noise limits (i.e., those set out in the scheme prepared to discharge condition 28 of the DPP). The assessments concludes that operational noise impacts from the facility (with the Proposal) are considered to represent a neutral level of effect and are considered as not significant.
- 10.5.4 In relation to the increase in residual noise levels at receptors, the assessment results showed that there will be no significant change in noise level, which indicates a negligible magnitude impact. The predicted level of effect that will be experienced by residential receptors is considered to be neutral and not significant.
- 10.5.5 In conclusion, the assessment in Chapter 6.0 shows that no significant noise impacts have been identified in relation to the operation of the LSEP scheme with the Proposal.

## **10.6 Landscape and Visual**

- 10.6.1 Landscape and visual impacts assessed in EIAR Chapter 7.0 have been confined to the visual effects of the plume from the LSEP with the Proposal (referred to as the 'Proposal Plume') against the plume of the LSEP as consented (referred to as the 'Consented Plume'). No other visual impacts of the scheme were considered

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necessary to be assessed (confirmed during the EIA Scoping exercise) as the Proposal will not change the design or appearance of the Consented Development.

10.6.2 The landscape and visual effects of the Proposal Plume were found to not differ materially from those of the Consented Plume. Although the Proposal Plume was found to be more frequently visible than the Consented Plume, when visible it will typically be short in length.

10.6.3 The plume assessment concluded that the more frequent presence of the Proposal Plume will have little appreciable influence upon the views available due to the context of the industrialised area. This industrial area includes the consented LSEP and existing large scale industrial structures at Lostock Works.

## **10.7 Socio-Economics**

10.7.1 Chapter 8.0 of the EIAR, together with the supporting figure, considers the likely effects of the Proposal with regards to socio-economic matters. The effects of the Proposal on both the construction and operational phases of the LSEP were assessed, in accordance with the scoping exercise.

10.7.2 The assessment identified that the Consented Development will have a beneficial effect on construction employment within the Study Area and that, as the Proposal will not affect the construction of the LSEP, these benefits will not change through the proposed amendments.

10.7.3 Notwithstanding this, the Chapter notes that the LSEP scheme will have a clear positive influence upon the continued viability of a range of contractor companies and their employees, as well of other businesses forming part of the supply chain. As such, there may be significant effects for specific businesses, and indeed for individuals employed in construction. This will be of general benefit to the wider economy in terms of retention and possible upgrading of skilled workers and in terms of the viability of construction sector businesses. Construction is a sector that is dependent upon the availability of continued opportunities to undertake built development, and the assessment states that the LSEP scheme with the Proposal will provide such an opportunity.

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10.7.4 The Chapter concludes that the LSEP scheme with the Proposal will have potential benefits in reducing the above average unemployment levels locally, particularly as a range of different job types, at different skill levels, will be provided. When considered in the context of the wider Study Area economy, the assessment concludes that there will be major beneficial and significant effects.

## **10.8 Climate Change**

10.8.1 In line with the 2017 EIA Regulations, EIAR Chapter 9.0, together with the supporting figures and appendices, sets out the impacts of the LSEP scheme (accounting for the amendments now proposed) on climate with reference to greenhouse gas (GHG) emissions and the vulnerability of the project to climate change.

10.8.2 The carbon benefits were assessed for the LSEP scheme as consented and for the LSEP scheme with the Proposal. The assessment identified that the LSEP scheme as consented will deliver a net carbon benefit over 25 years of 190,912 tCO<sub>2</sub>e (over the alternative of landfill disposal. This benefit will significantly increase through the Proposal to 277,383 tCO<sub>2</sub>e. The net carbon benefit of the LSEP with the Proposal on a local scale has been found to be greater than 1%, which is considered to be significant.

10.8.3 The Consented Development will provide resilience to the local electrical distribution grid and end users to deal with outages across the generation and distribution network. The Proposal will serve to increase this resilience further due to the additional electricity generated from greater waste throughput of the LSEP.

10.8.4 The Chapter identifies that the measures to avoid, prevent, reduce or offset any significant adverse effects on climate change and the vulnerability of the LSEP scheme have already been included in the consented design of the LSEP, and that these will not be altered by the Proposal.

10.8.5 The Chapter concludes that the LSEP is considered to be resilient to the effects of climate change and the Proposal will deliver further net carbon benefits to those of the Consented Development.