USKMOUTH POWER STATION DEVELOPMENT

ENVIRONMENTAL STATEMENT

Town and Country Planning (Environmental Impact Assessment) (Wales) Regulations 2017

On behalf of SIMEC Uskmouth Power Ltd.

APPENDIX 13.2: Legislation and Policy

Quality Management

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GLOSSARY

Term	Definition
ACT	Advanced Conversion Technology power plant
ADMS	Atmospheric Dispersion Modelling System
AOD	Above Ordnance Datum
APC	Air Pollution Control
AQMA	Air Quality Management Areas
BAT	Best Available Technique
BGS	British Geological Survey
BS	British Standard
BSI	British Standard Institute
CCGT	Combined Cycle Gas Turbine
CERC	Cambridge Environmental Research Consultants
CIEEM	Chartered Institute of Ecology and Environmental Management
CRTN	Calculation of Road Traffic Noise
DCLG	Department for Communities and Local Government
DMRB	Design Manual for Roads and Bridges
EcIA	Ecological Impact Assessment
EIA	Environmental Impact Assessment
EfW	Energy from Waste
EMF	Electromagnetic Fields
EPUK	Environmental Protection UK
ES	Environmental Statement
FEED	Front End Engineering Design
FGT	Flue Gas Treatment
FRA	Flood Risk Assessment
GGAT	Glamorgan Gwent Archaeological Trust
GHG	Greenhouse Gasses
HER	Historic Environment Record
HGV	Heavy Goods Vehicle
IAQM	Institute of Air Quality Management
IEA	Institute of Environmental Assessment
IED	Industrial Emissions Directive
IEFs	Important Ecological Features
LAQM	Local Air Quality Management
LCP	Large Combustion Plant
LDP	Newport Local Development Plan
LHV	Lower Heating Value
LVIA	Landscape and Visual Impact Assessment
NCC	Newport City Council
NLCAs	National Landscape Character Areas
NOx	Oxides of Nitrogen
NRW	Natural Resources Wales
NSR	Noise Sensitive Receptors
PROW	Publics Rights of Way
SRF	Solid Recovered Fuel
SUP	Simec Uskmouth Power Limited
ZTV	Zone of Theoretical Visibility
ZVI	Zone of Visual Influence

CONTENTS

APPENDIX 13.2: LEGISLATION AND POLICY

Introduction

1.1 This appendix to **Chapter 13: Climate Change** discusses the legislation and policy context for the assessment of climate change impacts of the proposed development.

1.2 Given that the primary purpose of the operational Uskmouth Conversion Project is energy (electrical) generation, rather than a waste management facility, the focus in this appendix is policy and legislation concerning energy and climate change. However, due to the waste-derived fuel source, legislation and policy concerning waste management has been considered where relevant to the combustion of waste-derived fuel pellets. This appendix therefore focuses on aspects of legislation or policy where these three matters (climate change, energy and waste) intersect.

1.3 Assessment of climate change risks and adaptation has been scoped out for the Uskmouth Conversion Project save in respect of flood risk. This appendix does not therefore discuss climate change adaptation policy. Legislation and policy concerning flood risk can be found in **Chapter 6: Hydrology** and its appendices.

Legislation

1.4 The Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (SI 2017 No. 571) require in Schedule 4, paragraph 5(f) that a description of *the impact of the project on climate (for example the nature and magnitude of greenhouse gas emissions) and the vulnerability of the project to climate change*" is included in an Environmental Statement where there are likely significant effects.

1.5 The Climate Change Act 2008 as amended commits the UK government to reducing greenhouse gas emissions by 100% of 1990 levels by 2050 and created a framework for setting a series of interim national carbon budgets and plans for national adaptation to climate risks.

1.6 At present the Third, Fourth and Fifth Carbon Budgets, set through The Carbon Budget Orders 2009, 2011 and 2016, are 2.54 $GtCO_2e$ for 2018-2022, 1.95 $GtCO_2e$ for 2023-2027 and 1.73 $GtCO_2e$ for 2028-2032.

1.7 The Climate Change Act also created the Committee on Climate Change to give advice on carbon budgets and report on progress. The Committee through its Adaptation Sub-Committee also gives advice on climate change risks and adaptation. Its advice regarding carbon and climate policy relevant to the Uskmouth Conversion Project is summarised below.

1.8 Total GHG emissions in the UK power generation sector are capped through participation in the EU Emissions Trading Scheme (ETS). The Uskmouth Conversion Project is defined under the Environmental Permitting regime as a co-incineration installation and as such would be subject to the EU ETS (under legislation in force at present), as set out in the EC Guidance on Interpretation of Annex I of the EU ETS Directive (EC, 2010). At the time of writing, February 2020, it is unclear whether the UK will continue to participate in a linked UK-EU ETS after the Brexit transition period,

or will implement a domestic carbon tax or other alternative; and whether the carbon tax, if introduced, will provide an equivalent total cap on emissions.

1.9 The Environment (Wales) Act (2016) provides Welsh ministers with powers to put in place statutory emissions reduction targets, including an aspiration to achieve net zero GHG emissions by 2050.

1.10 The Climate Change (Carbon Budgets) (Wales) Regulations 2018 regulates two carbon budgetary periods; the period of 2016-2020 limits GHG emissions to an average of 23% lower than the baseline year of 1990, and the period of 2021 to 2025 limits GHG emissions to an average of 33% lower than the baseline.

National energy, waste and climate change policy

Carbon Plan, 2011

1.11 The 2011 Carbon Plan (HM Government, 2011) is the UK's national strategy under the Climate Change Act for delivering emissions reductions through to the Fourth Carbon Budget period (2023-27) and preparing for further reductions to 2050.

1.12 It was expected to be updated or replaced by a national 'Emissions Reduction Plan' that the former coalition government committed to publish in 2016, but that has been delayed indefinitely. Due to the age of the Carbon Plan, certain policy expectations have been overtaken by subsequent policy decisions: in particular, the expected government funding for deployment of carbon capture and storage (CCS) technology lapsed following the failure of the second CCS competition (NAO, 2017) for some years. Central government support for deployment of CCS in the UK in the 2030s has now been revived in the UK Carbon Capture Usage and Storage [sic] deployment pathway: An Action Plan (HM Government, 2018), though this is subject to pathways for cost reductions being found.

1.13 With regard to low carbon industry, the main desired measures summarised in paragraphs 37 to 50 are process/production efficiencies (immediate), replacing fossil fuels (during the 2020s) and use of CCS (from 2020s onwards). Overall a 20-24% reduction in industrial GHG emissions relative to 2009 levels is sought by 2027. Section 2 of the Carbon Plan, expanding on the detail of these measures, emphasises fuel switching to biomass or electricity and use of CCS. In paragraph 2.133, the Carbon Plan does note that for CHP in particular:

"the Government will continue to incentivise a combination of natural gas-fired and renewable CHP. CHP, especially for large-scale industrial plants, constitutes a significant opportunity to enhance energy efficiency and lower emissions from the industrial sector."

1.14 With regard to low carbon electricity generation, the policy summary in paragraph 44 indicates that fossil-fuelled electricity generation will only be supported if fitted with CCS; otherwise this would only provide backup at times of high demand. In Box 7 on page 41, the Carbon Plan lists combined heat and power (CHP) using fuels including waste among technology options to supply "*low carbon heat*" and in paragraphs 2.130 and 2.132, describes energy from waste as a sustainable biomass source and low carbon heat source for large-scale CHP opportunities.

Clean Growth Strategy, 2017

1.15 The 2017 Clean Growth Strategy for the UK (BEIS, 2018) contains a key objective of 'Delivering Clean, Smart, Flexible Power' and details specific policies through which this can be achieved:

- Policy 33 of the report states the government's intention to phase out the use of unabated coal for electricity production by 2025;
- Policy 35 sets government's intentions to improve the route to market for renewable technologies, with up to £557 million for further Contract for Different auctions;
- Policy 36 details plans to target a total carbon price in the power sector which will give businesses greater clarity on the total price they will pay for each tonne of emissions.

1.16 The report also emphasises the need for carbon capture, usage and storage (CCUS), in order to reduce the cost of achieving net-zero by 2050.

1.17 The strategy notes the significant progress made in decreasing GHG emissions from waste going to landfill and adopts goals of being a 'zero avoidable waste economy' by 2050 and diverting all food waste from landfill by 2030. The Strategy does not discuss energy from waste and effects on GHG emissions in detail, but does have a goal for the National Infrastructure Commission to "*work with the waste sector to ensure that different waste materials going into energy recovery processes are treated in the best possible way*" (page 111).

National Infrastructure Assessment, 2018

1.18 Although not adopted national policy, the advice of the National Infrastructure Commission (NIC, an executive agency of the Treasury) given in the National Infrastructure Assessment (NIC, 2018) is considered relevant. Chapter 2: Low cost, Low Carbon suggests that at least 50% of UK power should come from renewable sources by 2030, as part of the transition to a highly renewable generation mix.

1.19 With regard to recovering energy from waste (EfW), while noting the benefits of EfW for diverting waste from landfill, the National Infrastructure Assessment recommends that more use of alternative treatment for food waste and plastic in particular is encouraged to reduce GHG emissions. On page 34 it states that "*the successful delivery of a low cost, low carbon energy and waste system requires… encouraging more recycling, and less waste incineration.*"

1.20 And on pages 45-46:

"Incinerating less, recycling more

Energy from waste plants (incinerators) facilitated the move away from landfill, and make sense when the alternative is energy from fossil fuels. They incinerate 'black bag' waste and other wastes that cannot be recycled, producing electricity and providing heat where there is a source of demand nearby. However, lower cost, lower carbon options exist for some types of waste, in particular food waste and plastics."

Advice of the Committee on Climate Change

1.21 Although not itself setting government policy, the Committee on Climate Change's statutory role to advise government under the Climate Change Act 2008 means that its recommendations or identification of policy gaps are relevant to consider in this assessment.

1.22 In July 2019, the Committee released a progress report on UK emissions reductions. The report identifies key priorities for the Government to prepare for net-zero carbon, both this coming year and more long-term.

1.23 With respect to energy generation, the committee identifies a key priority of planning for operational CCS by mid-2020, with more large-scale emission removal (e.g. biomass with CCS) going forward into 2030. (page 14). It regards the government's 2018 Action Plan for CCUS to be a non-concrete approach to tackling the challenges in deploying CCS in the UK. (page 60).

1.24 On page 15, the Ccommittee also encourages more robust routes to market for low-carbon technologies and sets out the target of 320 TWh of low-carbon generation by 2030.

1.25 In May 2019, the Committee released 'Net Zero: The UK's contribution to stopping global warming', with an associated technical report, in which the following suggestions are made;

1.26 The Committee has recommended that Wales set a target of 95% CO_2 reduction relative to 1990 (page 11). However, as mentioned earlier in this appendix, Wales has stated an aspiration to achieve net zero.

1.27 While the Committee recognises that achieving net-zero by 2050 is necessary in order to deliver on the commitment made by signing the Paris Agreement, it warns that this is only possible if "*clear, stable and well-designed* [emission reducing] *policies"* (page 11) are further introduced across the UK. The committee warns that climate policy must be ramped up significantly, with most sectors achieving close to net zero before offsetting. Furthermore, the aim should be bet through UK domestic efforts, without relying on international carbon credits.

1.28 Both the Net Zero report and the technical guidance strongly emphasise the necessity of the wide scale implementation of CCS. The Committee had previously recommended that the first CCS cluster should be operational by 2026, with two clusters, capturing at least 10 $MtCO_2$ by 2030. The suggestion is now that more will be needed, to meet a net-zero target. CCS is a key policy of the 2019 Net Zero report.

1.29 A key policy suggestion in the report is that of low-carbon power. The Committee state the need to rapidly expand the supply of low-carbon power, especially during the transition phase to a net-zero economy. Power sources such as nuclear and CCGT with CCS and CHP can reduce emissions more cheaply than the expected carbon price (page 19 of the Net-Zero Technical report).

1.30 On page 20, the technical report suggests that the rollout of low-carbon generation, using the policy instruments set up under the UK's Electricity Market Reform programme, can decarbonise up to 95% of power generation. The remaining 5% will require widespread rollout of CCs and hydrogen infrastructure.

1.31 Page 55 of the Technical Report highlights the Committee's continued recommendation of reducing the carbon emissions of the power sector to somewhat below 100 gCO_2/kWh by 2030.

1.32 The Committee is not currently recommending any amendments to the current fourth and fifth carbon budgets.

Prosperity for All: A Low Carbon Wales (2019)

1.33 Wales' Low Carbon Pathway policy requires the decarbonisation across a number of sectors, including power. This will mean avoiding locking-in high-carbon infrastructure. Furthermore, the Welsh government has highlighted its ambitions to be carbon neutral by 2030 (page 54).

1.34 The 'Power' section in part three of the report reiterates the Welsh government's plans to transition the power sector to a predominantly low carbon sector. However, it also states that more carbon-intensive power sources such as gas will have a significant part to play in the transition, and in mitigating the intermittency issues with renewables.

1.35 Policy 26 of the plan states that, as of 1 April 2019, Welsh ministers have acquired greater powers in consent, planning and permitting with regards to energy policy. The changes have been put in place to help Wales reduce carbon emissions through the reduction of fossil fuel use and placing them at the bottom of the energy hierarchy.

1.36 Policy 31 states that Wales has a target of generating 70% of its electricity capacity through renewable sources.

National planning policy

Planning Policy Wales (2018)

1.37 Paragraph 5.7.8 of the Welsh planning policy report states that the overall commitment to tackle climate change is of paramount importance and introducing new sources of renewable and low carbon energy is essential for meeting this commitment. The report sets out the goal of generating at least 70% of its electricity consumption from renewable sources by 2030 (paragraph 5.7.16).

1.38 Paragraph 5.7.14 states that the Welsh government recognises an energy hierarchy to which all new developments are excepted to adhere to, thereby mitigating the causes of climate change. The energy hierarchy ensures that new developments will reduce energy demand and increase energy efficiency, are suitably located and designed and assist in meeting energy with renewable and low carbon sources. The energy hierarchy will become increasingly important with increased electrification (through increased use of electric vehicles etc).

1.39 The report sets out the duty of planning authorities to facilitate all forms renewable and low carbon energy developments. Paragraph 5.9.17 states *"planning authorities should give significant weight to the Welsh Government's targets to increase renewable and low carbon energy generation, as part of our overall approach to tackling climate change and increasing energy security*."

1.40 Paragraph 5.9.19 emphasises the need for developers to consider best practice and mitigation measures to be designed into the Uskmouth Conversion Project:

"Prior to an application being submitted, developers for renewable and low carbon energy developments should, wherever possible, consider how to avoid, or otherwise minimise, adverse impacts through careful consideration of location, scale, design and other measures."

Local planning policy

1.41 Local planning policy is set by the Newport Local Development Plan (2011-2026).

Newport Local Development Plan (2011-2026)

1.42 Objective 2 of the local plan highlights the City Council's commitment to ensuring development and land use in Newport makes a positive contribution to minimising, adapting to or mitigating against the causes and impacts of climate change. Maximising renewable energy sources is central to the objective, and the Plan's impact on climate change.

1.43 CE10: Renewable Energy states that renewable energy schemes will be considered favourably, subject to there being no over-riding environmental and amenity consideration. Brownfield sites will be favourably considered and where possible, should be considered before greenfield sites.

1.44 The Local Development Plan includes a General Development Principle (GP1) on climate change. The principles states that development proposals should be designed in to withstand the predicted changes to local climate, minimised energy use and reuse existing construction elements onsite. GP1 also highlights low or zero carbon energy sources as instrumental to preventing climate change.

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