6 December 2017

By email: development.central@fife.gov.uk

Dear Mr Mcgroaty

**17/03377/FULL: The installation and operation of up to ten gas engines with a generating capacity of 19.96MWe and ancillary development on land at the former Westfield opencast coal site, Kinglassie, Fife - Westfield O C C S Fife**

We wish to highlight a number of matters regarding the climate implications of the proposed development and the use of waste heat, which Fife Council may wish to consider in assessing this proposal.

## 1. Fossil fuel power generation, energy security and Scotland's decarbonisation targets

The application states that "The Proposed Development would help to ensure energy security and would assist in the move to decarbonised energy generation by supporting renewable energy through addressing the intermittency of supply from these technologies."

The Scottish Government has a target to cut emissions from the electricity sector from 196 grams of $CO_2$/kWh in 2015 to below 50g $CO_2$/kWh by 2030. Scottish Planning Policy states that the planning system should support transformational change to a low carbon economy, consistent with national targets.

The Fife Local Development Plan (LDP) (policy 11) "supports the development of a mix of energy generating and distribution technologies that will meet future national and local energy needs. There is a continued emphasis on the aim of reducing carbon emissions and other negative impacts of energy generation on the environment."

It should be highlighted that a gas power plant is not a proposal for low carbon or renewable energy generation and this proposal will not support the above renewable energy targets. There is no information provided in the application as to the expected carbon intensity of power generation, but this is likely to be significantly higher than 50g $CO_2$/kWh. UK Government figures indicate the average carbon intensity of gas power in 2016 was 359g $CO_2$/kWh[1]. Whilst it is unlikely that a single, small-scale gas plant would threaten the national 2030 decarbonisation target, a new generation of small-scale gas power plants may undermine the

[1] https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/643414/DUKES_2017.pdf

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target, particularly in the absence of measures to minimise carbon emissions such as use of waste heat.

It should be highlighted that whilst energy storage is required in order to integrate higher levels of renewable energy in our electricity system at a UK level, there is no evidence that distributed fossil fuel baseload power is required to ensure local or national security of supply. Scotland is part of a single, integrated Great Britain electricity grid, and independent research by DNV GL has shown that Scotland can securely and cost-effectively meet its 2030 decarbonisation target with almost 100% renewable electricity generation, playing to its natural strengths as part of the GB grid[2]. This research also found that "A system based almost entirely on renewables is feasible and desirable and therefore life-extending coal plants or building new gas plants is unnecessary. However, should new gas plants be built in Scotland they must have operational CCS from the outset."

The Scottish Government's Draft Climate Change Plan published in January 2017 recognises that in a low carbon energy system "System security is ensured through a diversity of generation technologies, enhanced system flexibility through increased storage, smart grid technology and appliances and improved interconnection."

RSPB Scotland recommends that the applicant should be required to provide more information regarding:

- The expected carbon intensity of power generated by the gas power plant.
- What measures are available to minimise those emissions in order to contribute to national decarbonisation targets.
- What evidence there is that baseload generation is required in Scotland in order to complement renewable energy generation

## 2. Use of waste heat

One of the most significant opportunities to minimise emissions from the proposed development is likely to be via use of waste heat. The application notes in several places the potential for contributing to future heat networks but provides no detail or commitments for the utilisation of waste heat.

The need for integration of heat and power is increasingly emphasised in planning policy. SPP states that "Development plans should seek to ensure an area's full potential for electricity and heat from renewable sources is achieved" and LDPs "should use heat mapping to identify the potential for co-locating developments with a high heat demand with sources of heat supply."

In order to meet these policy requirements, developers and Fife Council need to work together to ensure heat producers, such as power stations, are co-located with sources of heat demand such as a district heating scheme or industrial demand. To this end Fife Council has produced a 'Fife Heat Map' and the Policy 11 of the LDP states that "All applications that create a heat demand or waste heat will be assessed against the Fife Heat Map."

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[2] Implications of a Decarbonised Power Sector in Scotland by 2030.
http://assets.wwf.org.uk/downloads/implications_of_a_decarbonised_power_sector_in_scotland_by_2030_dnv_gl_wwfscotland_fi_1.pdf

Indicating a potential for future use of waste heat on a site is insufficient to meet the above policy requirements. RSPB Scotland recommends that, in order to meet local and national planning policies:

- The potential for use of heat from the site must be assessed in detail from the outset and opportunities maximised and
- Any planning consent should require the development to connect to district heating, or the conclusion of a commercial agreement for local heat use.

I hope these comments are helpful.

Yours Sincerely

[redacted]

Claire Smith
Senior Conservation Officer
[redacted]