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Your
Ref:

28 May 2009

Bogdan Kowalewicz
Gas Transmission
Ofgem
9 Millbank
London SW1P 3GE

By e-mail: gas.transmissionresponse@ofgem.gov.uk

Dear Mr. Kowalewicz,

PROPOSED DISPOSAL OF PART OF NATIONAL TRANSMISSION SYSTEM (NTS) FOR CARBON CAPTURE AND STORAGE

Thank you for providing the Scottish Environment Protection Agency (SEPA) with the opportunity to comment on the above consultation document.

SEPA's main role is to protect the environment and human health. We do this by regulating activities that can cause harmful pollution and by monitoring the quality of Scotland's air, land and water, working to enable those we regulate to comply with the legislation. SEPA has an important role in considering the environmental impacts of energy decisions, and within its remit, contributing to reducing these impacts.

Carbon capture and storage (CCS) is considered to be one possible technological solution (or mitigation) that has the potential to significantly reduce emissions of carbon dioxide (CO₂) from fossil fuel power stations. SEPA is supportive of the aim of developing CCS technology and of the development of a regulatory regime, which whilst enabling CCS, will also protect human health and the environment.

Development of a transport system for compressed CO₂ is an essential step in developing carbon capture and storage in the United Kingdom (UK) and globally. Currently there is no example of capture, transport and storage at the scale required for a power plant, nor of the commercial application of the entire chain of carbon capture, transportation and storage at a large scale.

SEPA has no comment on the specific commercial, asset valuation and transmission regulation questions set out in the consultation document, but is interested in responding to the first question: Do you think this proposal is a good idea in principle?

The proposal is based on the plans of one of the bidders in the Department of Energy and Climate Change (DECC) CCS competition. The successful bidder will demonstrate, with DECC funding, the full chain of capture, transport and storage at a commercial scale. This will include capture of CO₂ from 300 – 400MW of the capacity of a coal-fired power plant. This amount may be phased in, but 50 – 100MW must be captured, transported and stored from 2014.



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SEPA notes that the demonstration project offers an opportunity to develop learning and information regarding the transmission of CO₂ by pipeline in the UK in addition to the opportunity to gain further understanding of the viability of re-use of certain aspects of the existing energy structure including pipelines and compressor stations.


In the UK there is limited experience of the transportation of CO₂ by pipeline, however transport of CO₂ by pipeline is common in the United States (US) and Canada where several thousand kilometres of CO₂ pipelines exist. Pipelines in North America have been designed to enable supercritical/dense phase CO₂ transport. It should be noted that US experience is largely within unpopulated areas.

SEPA views the Ofgem proposals as an opportunity to assist in the development of pipeline standards for, and the understanding of, CO₂ transport in the UK. As current Health and Safety Executive (HSE) guidance notes, the US Code of Regulations only applies to pipelines transporting CO₂ in the supercritical phase and there appear to be no US Regulations addressing the transport of CO₂ in the gaseous or liquid phase. There are currently no UK pipeline standards relating to the transportation of CO₂.

SEPA is supportive of this proposal in principle as it is believed that the proposal can contribute to furthering knowledge and understanding of the transport of CO₂ by pipeline. Additionally the proposed location provides an excellent opportunity as St. Fergus benefits from both infrastructure and experience from the oil and gas sector, with access to potential storage facilities offshore. The addition of a feeder pipeline, if that option is chosen, from Scotland's central belt represents a route to storage for the majority of CO₂ emitters in Scotland.

As a public body committed to openness and transparency, SEPA feels it is appropriate that this response be placed on the public record. If you require further clarification on any aspect of this correspondence, please contact Carolyn Vannan, Principal Policy Officer, SEPA Corporate Office, at the address shown below.

Yours sincerely



Janice Milne
Head of Environmental Policy

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