

Our Ref: ORG13-A2085  
Your Ref:

Andy MacFaul  
Head of Better Regulation  
The Office of Gas and Electricity Markets  
9 Millbank  
London  
SW1P 3GE

Environmental Strategy

24 September 2007

Dear Mr MacFaul

### **OFGEM'S FIVE YEAR STRATEGY 2008-13**

Thank you for giving the Scottish Environment Protection Agency (SEPA) the opportunity to contribute to the development of Ofgem's five year strategy 2008-13.

SEPA would like to see the strategy place more emphasis on the need to address energy demand rather than energy supply in the shorter term. Given that it will take approximately 15 years before we are able to make any substantial change in the UK's energy mix it is imperative that demand for energy is continually reduced during this period if we are to make any serious inroads to cutting the UK's greenhouse gas emissions and meeting reduction targets as proposed in the UK Climate Change Bill. SEPA considers that Ofgem has a critical role to play in working with stakeholder's and partners in educating and advising consumers on energy conservation and efficiency measures.

SEPA currently provides advice and information to regulated industry and small to medium sized enterprises (SMEs) on energy efficiency and anticipates a stronger regulatory role with respect to Scotland's major energy installations and users which will align our powers with those of the Environment Agency for energy producers in England and Wales. Our role in regulation of the Emissions trading Scheme and forthcoming Carbon Reduction Commitment places us in a strong position to work more closely with Ofgem in helping to effect real changes to the UK's energy demands and security and help realise real reductions in greenhouse gas emissions, sustainable development and delivery of other environmental gains

SEPA considers climate change to be the biggest threat facing the UK - economically, socially and environmentally. We will be consulting on a draft climate change Strategy later this year. The strategy presents SEPA's proposed response to climate change over coming years and places a strong emphasis on partnership working, advice and influencing to help Scotland and our global neighbours adapt and minimise our contribution to climate change. We envisage our Strategy as being a strong vehicle for delivery of mutually beneficial outcomes with other regulatory agencies and partners and would welcome the opportunity to work more closely with Ofgem to this end.

SEPA welcomes Ofgem's move to rate green electricity for the consumer, however, we would like the strategy to explore and implement means of simplifying the system and providing better information and education for consumers on green energy.

Ofgem needs to work more with the energy supply companies the promotion of energy efficiency. SEPA is disappointed by the lack of innovation and substantive measures taken by companies to date and would like to see Ofgem taking a more proactive role in ensuring that energy providers make substantial effort in this matter.

Ofgem needs to work more with others in particular the energy suppliers to assist both domestic and industrial consumers in reducing their energy usage.

Ofgem must continue to ensure that Scotland's concerns and issues are adequately addressed, not least because we have a small number of major players in the energy market. The issues for Scotland are not always the same as those for the rest of the UK. For instance, over and above new environmental legislation, the next few years will be significant in the development of the Scottish generating market.

Finally, SEPA believes that there is a tension between what Ofgem sees as its core business of "protecting and advancing consumers' interests" (i.e. constantly ensuring prices are as low as possible) and the need to reduce the demand for energy (as all forms of generation have some environmental impact) and thus protect the environment. It is important that as the UK develops an overall strategy for energy generation, transmission and management, that the environmental issues are addressed and appropriate management responses play a key role. For instance, while developing a transmission and generation architecture that is both secure and minimises the generation required, it is also important to minimise the environmental impact. In some cases it may be better to trade off gains in other areas to reduce the overall environmental impact of generation.

I enclose herewith comments provided previously by SEPA in the context of Ofgem's future strategy which remain relevant to this consultation. If you require any further assistance from SEPA on this matter please contact June Graham ([june.graham@sepa.org.uk](mailto:june.graham@sepa.org.uk)) at the address below. We are, as usual, happy for this response to be placed in the public domain.

Yours sincerely

**Dave Gorman**  
**Head of Environmental Strategy**

**Enc**

### **Greater Opportunity For Partnership With SEPA on Environmental Issues**

Ofgem appears to treat health and safety issues fundamentally differently to environmental matters. In terms of the latter, they appear to let others take the lead. This may be appropriate in terms of providing targets for renewable energy sources, however, there are several major pieces of environmental legislation which have a significant impact on capital expenditure at individual plants using fossil fuels. Such legislation & issues include:

- The Pollution Prevention and Control Regime;
- The Large Combustion Plant Directive;
- The Emissions Trading Directive;
- The Waste Incineration Directive;
- Transco, the use of CHP as BAT, and the generation of power at GCS;
- The concentration on efficiency and high level Kyoto type commitments to the occasional detriment of other relevant statutes.

Ofgem has a major part to play in ensuring that necessary environmental improvements arising from this legislation are addressed adequately by the companies they regulate. There is a greater need therefore for Ofgem and the principal environmental regulators to work in partnership.

### **The Importance Of Providing For Embedded Generation and Intermittent Operation**

SEPA was pleased to see that the Energy White Paper recognises the need for developing the national grid in such a way that it can cope with embedded generation with an intermittent generating pattern, primarily to assist the exploitation of renewable energy. This would also assist the development of other smaller generating capacity such as waste-to-energy plants which may have a significant part to play in meeting other environmental targets such as those in the Landfill Directive. SEPA therefore considers that this area of work should be a priority for Ofgem. Moreover, the transition from large generating capacity to smaller embedded units is novel and would be an area in which Ofgem could lead research. Closely coupled to this would be the need to research means of storing electricity which would help even out peak demands without having to resort to back-up generating stations using fossil fuels. The latter was identified as an important issue by the Royal Commission on Environmental Pollution in their 22nd Report.

### **The Importance of Energy Efficiency & Storage**

Ofgem could develop its role in energy efficiency to ensure that energy is saved (or the need for energy is avoided) throughout the supply chain. It is unlikely that this can be achieved by improvements in energy efficiency while there are few incentives for investment in energy efficiency measures due to the current low cost of relatively low energy costs. Ofgem must recognise the real cost of energy including its externalities, as it has started to do by ascribing a monetary value to the cost of methane leakages from the gas transmission network. Arguably this leads to more sustainable forms of generation and use. This represents a potential "win-win" for the environment, generators and consumers alike. By reducing the demand for energy, through better building design or by exploiting measures such as passive solar gain, it is possible to reduce the need to consume fossil fuels and to reduce the need for ever greater capacity distribution systems. The latter helps reduce the cost of energy to the consumer and in the specific case of building design do much to alleviate fuel poverty.

Energy storage is an essential requirement if the UK is to rely on greater generation of energy from renewable sources, which in the short to medium term will be dominated by wind power. Ofgem should investigate how energy storage can be incorporated most effectively into the electricity supply system and into the market, and should develop operating rules to ensure the maximum environmental benefit. It should also address questions such as:

- what is the best location for storage - near the generator or the user;

- can the market be used to achieve the best environmental outcome and what mechanisms would be needed; and
- how can the market address the inherent inefficiencies of storing energy, including the potential decay of energy?

### **Energy Services**

Ofgem could be instrumental in encouraging more radical thinking about the definition of energy services. At present, customers purchase a commodity, such as gas or electricity, which they then have to manage. An energy service provider could determine the best option for an individual installation, which could include improved insulation or installation of passive solar water heating to meet the needs of a household. New ways of packaging and selling energy services are required from suppliers. Ofgem should investigate how these services can be made available to the domestic customer and what mechanisms are necessary to provide the financial security for service providers to invest in energy efficiency measures that may have a long pay back time.

### **Research**

SEPA would welcome discussions on more integrated and holistic research. This could partly be addressed by discussions with the Scotland and Northern Ireland Forum for Environmental Research (SNIFFER) and the Environment Agency (EA), (some joint work with EA is already under way on power station emission trends).