CoalImp
Association of
UK Coal Importers

For the attention of Matt Wieckowski
Department of Energy and Climate Change
4th Floor, Area D
3 Whitehall Place
London SW1A 2AW

4th October 2011

Dear Sirs,

Consultation on Possible Models for a Capacity Mechanism

I am pleased to respond to the consultation on Possible Models for a Capacity Mechanism on behalf of CoalImp – the Association of UK Coal Importers. This consultation has major implications for our members and for the country.

CoalImp represents major coal users (including virtually all of the coal-fired generators in the UK), rail companies, ports and other infrastructure operators in the coal supply chain. The twenty members (listed in the attached Appendix) account for the handling, transportation and use of the majority of imported supplies into the country, in turn accounting for over half of the UK's coal-fired electricity.

Individual CoalImp members will be submitting detailed responses to the Consultation, answering the complete list of questions posed. This response concentrates just on some of the key features and benefits of existing coal-fired generation and the key requirement, which we believe is essential for any capacity mechanism to fulfil, to support this existing coal-fired capacity over the period of transition until coal with CCS has been rolled out commercially.

Introduction

The UK electricity generating industry wishes to retain coal-fired production in the generating mix, for the diversity that it offers, the flexibility that it provides and the need to retain continuity in the supply chain, in the hope and expectation that it will serve carbon capture and storage (CCS) in the longer term. CoalImp was pleased to note, in the White Paper on Electricity Market Reform, that the Government recognises the important role that coal-fired generation can play.

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We welcome the Government's intention to provide a stable and long-lasting framework for investment in the electricity industry. The challenges facing the coal industry – indigenous and imported – are directly related to those facing the electricity generating industry. Credible and stable market arrangements are essential to give companies the confidence to invest in the UK.

Coal-Fired Electricity Generation

New Coal-Fired Plant

There is clear need for massive investment in the period ahead to replace generating plant which will be decommissioned, and to meet future demand. But, opportunities for investment in new coal-fired power stations are restricted by

- The requirement to fit partial CCS (which does not apply to gas-fired plant);
- The effect of the carbon floor price on the non-CCS portion of capacity at any new coal-fired power stations;
- The need for CCS to be demonstrated successfully on a large scale; and
- The slow progress with CCS, which is likely to lead to more new capacity being (unabated) gas-fired.

CoalImp firmly believes that coal with CCS should form an important and significant part of the generation mix in the long term and will contribute to the security and affordability of a de-carbonised electricity supply. However, for CCS to be rolled out at scale on a commercial basis, it is essential that the demonstration plants proceed as rapidly as possible. This is made all the more essential given the amount of new unabated gas capacity which is likely to be built, which must be retrofitted with CCS in due course to avoid long-term carbon lock-in.

CoalImp is concerned at the continued slow pace of the implementation of the CCS programme and is concerned that this, together with any delays/setbacks in other low-carbon generation, is likely to lead to yet more unabated gas plant being built.

Existing Coal-Fired Plant

Against this background, it should be recognised that the existing fleet of coal-fired power plant fulfils an excellent service in covering for output shortfalls elsewhere. It is important that existing coal plant should be able to continue to provide this service, albeit gradually diminishing, until suitable new low-carbon capacity (including coal with CCS) can take over this essential role.

The **Carbon Price Floor** is likely to have a very negative impact on generation from existing coal stations and makes investment decisions needed to meet the requirements of the Industrial Emissions Directive (IED) more difficult. However, thanks to successful lobbying in Brussels by the UK Government and others, the IED now provides a number of options which could enable existing plants to

continue providing secure and flexible output at times of need, with suitable incentivisation.

In the early 2020's the problems associated with the intermittency and unreliability of wind generation, and the inflexibility of nuclear generation, will be increasing, but deployment of fossil fuels with CCS may still be relatively limited. A **Capacity Mechanism** may represent a suitable means of enabling existing coal-fired generation to continue providing essential back-up, and if signalled early enough may prevent the premature closure of some coal capacity, as well as possibly supporting investment in Selective Catalytic Reduction (SCR) to meet the full NO_x requirements of the IED. This is surely better economics than building new unabated fossil fuel plant for peaking purposes. Overall carbon emissions would be unaffected as these are governed by the overall EU cap.

Meeting the Requirements of a Capacity Mechanism

During the cold spell in December 2010, 24GW of coal plant was called to run, leaving just under 5GW in reserve. 8GW of coal plant is going to close by 2016 with a real risk of further closures under the IED. As we go forward, something is needed to fulfil the role currently played by coal in the flexible generation sector. Existing coal plant, currently operating successfully, must surely be the lowest cost way of backing up the growing number of intermittent renewables planned in the UK, and therefore should be retained to provide this role, helping to prevent yet more costs being piled onto UK businesses and consumers which are not faced by their competitors in Europe and beyond.

Existing coal stations should benefit under a Capacity Mechanism, whatever its detailed design, since they can provide a significant amount of secure, relatively low-cost back-up capacity. Coal power stations have the added benefit of being able to safely and securely stockpile fuel, ready to be called under this mechanism, thus providing support at any time.

However, any mechanism must recognise the realities associated with keeping plant available for operating at relatively low load factors. Incentives would need to cover sufficient of the fixed costs of maintenance and staffing etc. to avoid premature closure. There should be a clear early signal that capacity payments will be available to such plant through the mid-2020s to provide a guaranteed income. By avoiding an overdependence on expensive imported gas at periods of peak demand, this approach represents both a more secure and a more affordable alternative.

It is important that existing coal plants are not forced to close prematurely (due to UK Government action on carbon pricing), as they are able to play a role in providing flexible low cost electricity during the transition to a low carbon economy. This will enable the UK coal supply chain to continue to invest and preserve the necessary skills base to maintain current levels of production in readiness for the growth of coal plant with carbon abatement (CCS). It will also help preserve the thousands of jobs within the coal infrastructure chain.

Benefits for Coal Infrastructure

The overall size of the market for coal in electricity generation – whether in old or new plant - has major implications for the coal supply chain, including ports and railways. There is a real risk that if the overall market drops below a "critical mass", as existing stations close and before sufficient new stations with CCS have been rolled out, this infrastructure could be seriously diminished or lost.

Although indigenous coal supply is often cited as a key element in security of supply, it should be noted that coal imports complement this security in a number of ways:

- Indigenous coal output is, by its very nature, inflexible. By supplying the balance between indigenous production and overall market demand, imports provide this flexibility. This was clearly demonstrated in 2010 where the downturn in coal demand from generators fell entirely on imported steam coal supplies which were down by around 45% on the previous year. Indigenous production could not respond to this level of flex.
- The lower sulphur content of most imported coals will enable generators to manage the supply mix to meet the requirements of the IED. Even in the case of opted-in plant with flue gas desulphurisation, some would struggle to meet the relevant emission limit values from 2016 with a pure diet of high-sulphur indigenous coals.
- A similar consideration is likely to arise in respect of NO_x limits, although the relationship between coal quality and NO_x emissions is less clearly defined than in the case of sulphur.
- Geographical considerations and generators' concerns to maintain supply diversity are likely in any event to keep an element of imports in the mix, even at lower levels of overall demand.

If there is some certainty that a significant part of the existing fleet of coal-fired stations will continue through the mid-2020's, together with the prospect of a new fleet of fully abated coal-fired power plant coming on stream at the same time, then coal demand will not fall below the critical mass needed to maintain coal infrastructure in the UK, with its associated benefits in terms of jobs and the security and affordability of electricity supply.

Summary

The UK electricity generating industry wants to retain coal-fired production in the generating mix, for the diversity that it offers, the flexibility that it provides and the need to retain continuity in the supply chain, in the hope and expectation that it will serve carbon capture and storage (CCS) in the longer term.

CoalImp firmly believes that coal with CCS should form an important and significant part of the generation mix in the long term and will contribute to the security and affordability of a de-carbonised electricity supply. However, CoalImp is concerned at the continued slow pace of the implementation of the

CCS demonstration programme and is concerned that this, together with any delays/setbacks in other low-carbon generation, is likely to lead to yet more unabated gas plant being built.

In the early 2020's the problems associated with the intermittency and unreliability of wind generation, and the inflexibility of nuclear generation will be increasing, but deployment of fossil fuels with CCS may still be relatively limited. A Capacity Mechanism may represent a suitable means of enabling existing coal-fired generation to continue providing essential back-up, and if signalled early enough may prevent the premature closure of some coal capacity, as well as possibly supporting investment in Selective Catalytic Reduction to meet the full requirements of the Industrial Emissions Directive. This is surely better economics than building new unabated fossil fuel plant for peaking purposes. Overall carbon emissions would be unaffected as these are governed by the overall EU cap.

It is important that existing coal plants are not forced to close prematurely, as they are able to play a role in providing flexible low cost electricity during the transition to a low carbon economy. If there is some certainty that a significant part of the existing fleet of coal-fired stations will continue through the mid-2020's, together with the prospect of a new fleet of fully abated coal-fired power plant coming on stream at the same time, then coal demand will not fall below the critical mass needed to maintain coal infrastructure in the UK, with its associated benefits in terms of jobs and the security and affordability of electricity supply.

Yours faithfully

Nigel Yaxley
Managing Director

APPENDIX

CoalImp Membership

Associated British Ports
Clydeport
DB Schenker
Drax Power
EDF Energy
E.ON Energy Trading
Fergusson Group
Freightliner Heavy Haul
GB Railfreight
Hargreaves Services
International Power
Network Rail
Oxbow Coal
Port of Tyne Authority
Rio Tinto Alcan
Rudrum Holdings
RWE Trading
Scottish Coal
Scottish Power Energy Management
SSE Energy Supply