



ATH Resources

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Department of Energy and Climate Change
3 Whitehall Place
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Dear Sirs,

Consultation Document on Electricity Market Reform: Response by ATH Resources plc

ATH Resources is an AIM-listed operator of surface coal mines and has mines in production in East Ayrshire, Dumfries and Galloway and Fife. The Company is one of the largest producers of coal in the UK, providing coal principally to the electricity supply industry and also the industrial and house coal markets.

ATH Resources (ATH) is pleased to respond to this consultation, which has major implications for its business, a business which is important for employment and the local economy in the areas where it operates.

As this is such an important issue for the UK coal industry in general and for ATH in particular, I have prefaced answers to the individual questions with some general overarching comments, summarising the main issues.

Introduction

ATH recognises the need for reform of the electricity market if the necessary investment is to be forthcoming to achieve near zero carbon electricity generation by the early 2030s whilst ensuring security of supply and affordability. However, coal production in the UK is a growth industry. Output has increased by some 8% over the last three years with a commensurate increase in employment and investment. The introduction of the full raft of Electricity Market Reform (EMR) proposals, whilst good in parts, will bring this growth to a halt, and then reverse it, perhaps dramatically so. We believe that UK produced coal will be replaced by imported gas, as set out below.

Security of supply

ATH believes that the risks to security of supply have been underestimated. First, the need to purchase carbon allowances under the EU ETS from 2013 may result in plant opted out under the LCPD closing earlier than anticipated. Second, the Government's interpretation of the flexibility available under the IED may be subject to challenge. If so, there may be further closures of existing plant earlier than anticipated.

ATH considers that the EMR package exacerbates these risks of premature closure. It is imperative that the transition from old plant to new plant is carefully managed and that the closure of existing coal-fired capacity does not take place too quickly.

Carbon price support

Notwithstanding these wider concerns ATH finds much to commend in the specific EMR proposals but has major concerns on certain points. We can see no reason for carbon price support in addition to Feed-in Tariffs (FITs) for low carbon technologies. It is the FITs that provide both the price and the certainty to enable these technologies to develop. Carbon price support adds nothing to this.

Emissions performance standards

ATH sees no merit in the proposal for an Emissions Performance Standard (EPS) as set out in the consultation document. It merely restates existing Government policy in another way. The EPS proposal would have merit if it contained a strong signal that it will be applied at a reduced rate of 100g CO₂/kWh by, say, 2025 to all new and carbon capture ready (CCR) fossil fuel plant once carbon capture and storage (CCS) is technically proven and commercially available.

ATH is extremely concerned that the preferred package will result in a very low level of coal-fired generating capacity in the mid 2020s and a market for coal that will not be sufficient to sustain indigenous coal production at that time.

Carbon price support will do nothing for the development of low carbon technology that FITs will not do. It will, however, drive gas-fired generation at the expense of coal-fired generation. Whilst this may result in earlier carbon reductions it will result in long-term carbon lock-in at unabated gas plant which will make the achievement of longer term reductions in carbon emissions much more difficult to achieve.

An EPS that does not give a very strong signal that CCS will be required to be fitted to new and CCR gas plant at some time in the 2020s also acts as a driver for the construction of unabated gas plant.

ATH is concerned that, at peak periods on cold, still winter days, there may be a massive overdependence on gas in the mid 2020s. This poses severe security of supply and price risks and ATH urges the Government to carefully consider these.

Capacity payments

Capacity payments may provide an incentive for some existing coal-fired plant to invest to meet the requirements of the Industrial Emissions Directive (IED) and hence continue beyond 2023. However, early investment decisions are required and the availability of capacity payments must be signalled sufficiently early (i.e. a decade in advance) if those decisions are to be influenced.

ATH urges the Government to carefully consider the interaction between the package of EMR reform measures and the requirements of the IED.

Recommendations

If the Government feels it necessary to include carbon price support and an EPS in its reform, ATH's preferred package is as follows :-

- (i) Carbon price support at the lower trajectory to 2020 (Scenario 1)
- (ii) An EPS that reduces to 100g CO₂/kWh for all new and CCR plant by 2025 once CCS has been technically proven and is commercially available.
- (iii) Capacity payments signalled sufficiently early to enable investment decisions to be made to meet the requirements of the IED.
- (iv) FITs for all low carbon generation technologies including CCS on gas as well as coal-fired plant.

Conclusion

Responses to specific consultation questions are attached. Also attached for reference is the ATH response to HM Treasury's consultation on carbon price support. It should be seen, however, from the general comments above, that these proposals, if carried through, will have a major impact on our markets and therefore on our business. ATH is currently a coal production business operating entirely in the UK, and contributing to UK employment and the UK economy. We may be able to compete in the international market, but what a perverse outcome it would be for us to have to export coal to Europe, for the electricity produced to come back through the interconnector, whilst our home market is replaced by imported gas. The raft of policy proposals contained in the EMR and carbon price floor consultations will certainly lead us to review our strategic options for the future.

I would ask Government to reflect on whether a renewed dash for gas – the certain consequence of some of these proposals – is what is really intended.

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Responses to individual questions

Current market arrangements

1. Do you agree with the Government's assessment of the ability of the current market to support the investment in low-carbon generation needed to meet environmental targets?

Yes.

2. Do you agree with the Government's assessment of the future risks to the UK's security of electricity supplies?

No. There are a number of areas where ATH believes the Government's assessment of future risks is too optimistic.

First, with respect to existing plant, the need to purchase carbon allowances under the EU ETS from 2013 may result in plant opted out under the LCPD closing prematurely and not operating for the full 20,000 hours.

Second, ATH believes that the Government's interpretation of the flexibility available under the IED may be subject to challenge. If so, a significant level of plant capacity may close earlier than anticipated.

ATH considers that the EMR package exacerbates the risks of premature plant closures with earlier security of supply risks than anticipated. It is imperative that the transition from old plant to new plant is carefully managed and that the closure of existing coal-fired capacity does not take place too quickly.

The risks to indigenous production are set out elsewhere in this response but if there is perceived to be a risk that the market for coal in the mid 2020s may be inadequate to support an output of 20 mtpa, then investment in coal production will be stifled and output will fall. This will be replaced by imported gas or imported coal with an overall increase in security of supply risks.

Options for decarbonisation

Feed-in Tariffs

3. Do you agree with the Government's assessment of the pros and cons of each of the models of feed-in tariff (FIT)?

ATH considers the assessment between a CfD FIT and a premium FIT to be very finely balanced. It may be necessary to consider a linkage to fuel prices for low

carbon fossil fuel (i.e. CCS) and biomass generation, the competition for which would be unabated gas-fired plant. Gas-fired generation (plus the carbon price) sets the wholesale electricity price. As a result, the FIT must be designed to provide a benefit for coal or gas with CCS and biomass vis-à-vis unabated gas which is maintained in the light of changing coal and gas prices.

4. Do you agree with the Government's preferred policy of introducing a contract for difference based feed-in tariff (FIT with CfD) ?

Yes, provided there is some linkage to fossil fuel prices. If not, a Premium FIT is preferable.

5. What do you see as the advantages and disadvantages of transferring different risks from the generator or the supplier to the Government? In particular, what are the implications of removing the (long-term) electricity price risk from generators under the CfD model?

ATH has no comment.

6. What are the efficient operational decisions that the price signal incentivises? How important are these for the market to function properly? How would they be affected by the proposed policy.

ATH has no comment.

7. Do you agree with the Government's assessment of the impact of the different models of FITs on the cost of capital for low-carbon generators?

ATH has no comment.

8. What impact do you think the different models of FITs will have on the availability of finance for low-carbon electricity generation investments from both new investors and the existing investor base?

This depends on the relationship between the FIT and fossil fuel prices (see Q.3 above) The difference between low carbon coal or gas generation with CCS and biomass generation on the one hand, which are exposed to fuel prices, and other forms of low carbon generation without such exposure on the other, which are not exposed to fuel prices, must be recognised and taken into account in the FIT design if investment is to be bankable. Setting the level of FITs appears to take no account of the investment cost of the various low carbon options. The interaction between the support level and the investment cost will be fundamental. The cost of capital is only one component of this and is unlikely to be the most important component.

9. What impact do you think the different models of FITs will have on different types of generators (e.g. vertically integrated utilities, existing independent gas, wind or biomass generators and new entrant generators)? How would the different models impact on contract negotiations/relationships with electricity suppliers?

ATH has no comment.

10. How important do you think greater liquidity in the wholesale market is to the effective operation of the FIT with CfD model? What reference price or index should be used?

ATH has no comment.

11. Should FIT be paid on availability or output?

Output. Availability issues should be addressed via the capacity payment mechanism.

Emissions Performance Standards

12. Do you agree with the Government's assessment of the impact of an emission performance standard on the decarbonisation of the electricity sector and on security of supply risk?

No. The proposal as it stands merely restates existing government policy in another way. As such, it will not incentivise the construction of new fossil fuel plant with CCS; it will merely disincentivise the construction of new coal-fired plant compared to the alternative of unabated gas. A single, non fuel-specific EPS will always disadvantage coal-fired generation and, as such, will reduce diversity and hence security of supply.

In any event, there must be a much clearer signal than that contained in the EMR package as it stands that the EPS will be lowered at some point such that new gas-fired plant will need to be equipped with CCS.

Clarification is also required on how the proposed EMS relates to the funding rules for CCS demonstrations and exemption from carbon price support for the carbon abated.

Overall, the EPS as proposed gives a free ride to new unabated gas-fired plant and discriminates against new coal-fired plant. In addition to carbon price support, this represents a major incentive to switch from coal to gas-fired plant when considering new investment. As such, it will reduce diversity and hence security of supply. Moreover, whilst it may achieve earlier reductions in carbon emissions, it will result in long-term carbon lock-in because of the large amount of unabated gas plant that it will incentivise. As a consequence, longer term carbon reductions will not be achieved and 2050 targets will not be met.

13. Which option do you consider most appropriate for the level of the EPS? What considerations should the Government take into account in designing derogations for projects forming part of the UK or EU demonstration programme?

Neither, except in the short term. ATH is not opposed to the lower EPS option provided there is an exemption for the CCS demonstration programme. However, once CCS is technically proven and commercially available, which ATH expects to have been accomplished by 2020, an EPS of 100g CO₂/kWh should be introduced no later than 2025 and the EMR package should give a clear signal to this effect. It may

be appropriate to have a slightly higher longer term EPS, say 150g CO₂/kWh, for CCS demonstration plants to recognise that they are 'first of a kind' and may not apply what eventually is proven to be the most efficient and effective technology.

14. Do you agree that the EPS should be aimed at new plant, and 'grandfathered' at the point of consent? How should the Government determine the economic life of a power station for the purposes of grandfathering?

No. Grandfathering should only apply to old plant not required to be constructed Carbon Capture Ready. All plant, including existing plant and plant now under construction that is, or was, required at the point of consent to be built CCR should have to apply the lower EPS level of 100g CO₂/kWh (or 150g CO₂/kWh for CCS demonstrators) from c2025 once CCS is technically proven and commercially available. The argument that this would be a disincentive to new build is nonsense. New investors should know, and existing investors should have known that, by definition, plant built with the requirement to be CCR would be, or will be, expected to fit, or retrofit, CCS at some point in time.

15. Do you agree that the EPS should be extended to cover existing plant in the event they undergo significant life extensions or upgrades? How could the Government implement such an approach in practice?

Only after the CCS Review shows that CCS is technically proven and commercially available. In any event, the EPS should apply only to upgrades. It would be wholly unreasonable to require an existing plant to comply with an EPS in the event that it chooses, for example, to invest in NO_x abatement to meet the requirements of the IED and hence extend its life beyond what it would otherwise have been. If there is no such exemption for life extensions in such circumstances, there will be no investment to meet the IED requirements and virtually the whole of the existing fleet of coal-fired plant will close.

The policy of both the previous and present governments completely ignores the higher efficiency route to lower carbon emissions that is being followed virtually everywhere else in the world. Allowing higher efficiency upgrades without the need to comply with the EPS initially at existing plant will (i) lower carbon emissions in the short term and (ii) facilitate later CCS retrofit because of the energy penalty associated with CCS. The backstop would be the requirement to comply with an EPS of 100g CO₂/kWh once CCS has been proved to be technically proven and commercially available.

16. Do you agree with the proposed review of the EPS, incorporated into the progress reports required under the Energy Act 2010?

Yes, but there should be a much clearer signal that plant will be expected to comply with an EPS of 100g CO₂/kWh (150g CO₂/kWh for CCS demonstration plant) from, say, 2025. This should apply not only to new plant but to all plant required to be CCR at the point of consent. Only by applying this requirement can long-term carbon lock-in associated with a large amount of unabated gas plant be avoided.

17. How should biomass be treated for the purposes of meeting the EPS? What additional considerations should the Government take into account?

Bearing in mind that burning biomass in coal-fired power plant represents by far the most cost-effective and by far the largest opportunity for biomass generation, the same EPS rules should apply to biomass as to coal-fired plant, including a requirement to meet an EPS of 100g CO₂/kWh from 2025.

The Government should, however, set up a mechanism to certify biomass sources to ensure that they are genuinely low carbon on the one hand and do not have adverse consequences, e.g. on food production, on the other.

18. Do you agree the principle of exceptions to the EPS in the long-term or short-term energy shortfalls?

Yes, although this provision should apply only in the short to medium term. In the longer term, beyond 2030, CCS can be expected to be near universal and there should be no ongoing need for such a provision.

Options for market efficiency and security of supply

19. Do you agree with our assessment of the pros and cons of introducing a capacity mechanism?

ATH can see no disadvantage to introducing a capacity mechanism.

With respect to the advantages, it is necessary to consider three types of capacity shortfall :-

- (i) At periods of peak demand, for a few hours and for a few GW.
- (ii) A shortfall that could exist between day and night in winter lasting for up to 12 hours a day and amounting to 10-15 GW.
- (iii) The capacity shortfall that will undoubtedly occur from time to time when climatic conditions result in minimal wind generation across the whole country. This problem will get greater and greater as the amount of wind generation capacity increases. Such conditions occur at least once every winter and in some winters last for several days.

Different solutions, or different mixes of solutions, may be necessary for the different types of capacity shortfall.

It should be recognised that the existing fleet of coal-fired power plant does an excellent job at present of covering for output shortfalls elsewhere. Within the EMR package as a whole, including the impact of carbon price support, care should be taken to ensure that a reasonable amount of such plant continues to have sufficient incentive to invest to meet the requirements of the IED and thus be able to continue

to provide this essential role, albeit gradually diminishing, throughout the 2020s when the problems associated with the intermittency and unreliability of wind generation, and the inflexibility of nuclear generation will be increasing. Capacity payments represent an ideal mechanism to provide this incentive but must be signalled sufficiently early to incentivise the necessary investment decisions which will need to be taken well before the end of the present decade.

ATH also expects coal-fired CCS plant to be able to fulfil this role for capacity shortfalls in categories (ii) and (iii) above but, in view of the high level of investment required, capacity payments will be required to recognise that such plant may be operating on load factors that are less than optimum.

For capacity shortfalls in category (i), either new peaking plant, or older existing plant operating on low load factors can meet the requirement. Total costs will be lower if existing plant continues in operation, thus avoiding the investment cost of constructing new peaking plant.

It is imperative that the availability and level of capacity payments is signalled well in advance, i.e. ten years or more. Much existing plant will need to take investment decisions in the near future if it is to meet the requirements of the IED. Capacity payments will provide a stream of revenue that will help to justify that investment for a reasonable amount of such plant, but will be of no use if it is not known that they will be available at the time the investment decision has to be made. The analysis in the EMR consultation document points to 3GW of plant “that would otherwise have closed” attracting capacity payments in the mid-2020s. It is not much use, for example, offering a capacity payment in 2024 for 2025-2026 if the plant has closed in 2023.

ATH understands that there are precedents for such long-term signalling. For example, National Grid have recently contracted for 800 MW of short-term reserve up to ten years in advance.

20. Do you agree with the Government’s preferred policy of introducing a capacity mechanism in addition to the improvement to the current market?

Yes.

21. What do you think the impacts of introducing a targeted capacity mechanism will be on prices in the wholesale electricity market?

Minimal. The wholesale price at the margin will continue to be determined by fossil fuel plant based on fuel prices plus the carbon price.

22. Do you agree with Government’s preference for a the design of a capacity mechanism:

a central body holding the responsibility;

Yes

volume based, not price based; and

Yes. This would seem to be essential to ensure a guaranteed margin.

a targeted mechanism, rather than market wide.

Yes, and targeted on those forms of generation that can meet the need. There can be no argument, for example, that intermittent and unreliable wind generation, or inflexible nuclear generation, should not attract capacity payments. However, within the identified forms of generation, the capacity payments should be market wide.

23. What do you think the impact of introducing a capacity mechanism would be on incentives to invest in demand-side response, storage, interconnection and energy efficiency? Will the preferred package of options allow these technologies to play more of a role?

ATH has no comment.

24. Which of the two models of targeted capacity mechanism would you prefer to see implemented:

Last-resort dispatch; or

Economic dispatch.

ATH has no comment.

25. Do you think there should be a locational element to capacity pricing?

Yes, if there is an identified need but any additional payment for a particular zone should not exceed the value of transmission losses associated with supplying from other zones.

Analysis of packages

26. Do you agree with the Government's preferred package of options (carbon price support, feed-in tariff (CfD or premium), emission performance standard, peak capacity tender)? Why?

No. ATH can see no need for carbon price support in addition to FITs. It is FITs that will provide both the price and the certainty for low-carbon generation. Carbon price support cannot add to this.

Moreover, carbon price support will incentivise switching from coal to gas with all the security of supply and price risks that will entail. Whilst this may result in earlier carbon reductions, it will lock in carbon emissions in the longer term because of the amount of unabated gas plant that will be constructed as a result. This will make it more difficult to meet longer-term carbon reduction ambitions.

Carbon price support will result in a windfall gain for existing nuclear power stations. This is wholly unjustifiable. There also needs to be clarification of the mechanism

whereby carbon price support increases the overall carbon price in conjunction with the EU ETS price. ATH considers there is great potential here for confusion and unintentional consequences.

One further consequence of carbon price support is that it will drive the overall market for coal in the mid 2020s to quite low, and in any event uncertain levels. Investment decisions to maintain our mining business will become increasingly challenging. ATH urges the Government to carefully consider the EMR package in general, and carbon price support in particular, to ensure that investment decisions can be taken with confidence.

27. What are your views on the alternative package that Government has described?

ATH can see no reason for the inclusion of both FITs and carbon price support. The EPS is wholly redundant unless it signals that it will be reduced to require new and CCR gas capacity to fit or retrofit CCS, as well as new coal-fired capacity, once CCS has been technically proven and is commercially available. Also, carbon price support will result in a wholly unjustifiable windfall gain for existing nuclear stations.

28. Will the proposed package of options have wider impacts on the electricity system that have not been identified in this document, for example on electricity networks?

ATH has no comment.

29. How do you see the different elements of the preferred package interacting? Are these interactions different for other packages?

If the Government considers that the reform package has to include carbon price support, then the preferred package is as follows :-

- (i) Carbon price support which avoids as far as possible enforcing a switch from coal to gas that damages diversity and security of supply, risks high and volatile prices, and threatens the survival of the UK's mining industry. ATH therefore supports Scenario1.
- (ii) An EPS that reduces the 100g CO₂/kWh by 2025 for all new and CCR plant (150g CO₂/kWh for CCS demonstration plants) once CCS has been technically proven and is commercially available. Without such a reduction, the EPS is redundant.
- (iii) Capacity payments targeted to plant that can meet appropriate requirements, but are market wide within such categories, and signalled sufficiently early to enable investment decisions to be made to meet the requirements of the IED.
- (iv) Feed-in tariffs to encourage CCS for both coal and gas, as well as other low carbon generation, with the level determined to cover costs and provide a reasonable return on investment. The FIT may be appropriately lower for CCS demonstration plants subject to separate funding arrangements.

Implementation issues

30. What do you think are the main implementation risks for the Government's preferred package? Are these risks different for the other packages being considered?

ATH considers that the main risk arises from the complexity of the package with a high potential for unexpected interactions and unintended consequences. In particular, ATH is concerned that, at peak periods on cold still winter days, there may be a massive overdependence on gas in the mid 2020s. Moreover, this gas plant will be unabated and result in long-term carbon lock-in making the achievement of longer term emissions reductions more difficult.

ATH urges the Government to carefully consider how the package will interact with the EU ETS and with the impact of the Industrial Emissions Directive and any potential related revisions to the National Emissions Ceilings Directive and the Best Available Technology Reference Documents for Large Combustion Plant. Given these complex interactions, it would be all too easy to lose existing capacity inadvertently too quickly as operators take the low risk option and close plant. In particular, the need to purchase allowances under the EU ETS from 2013 may result in plant opted-out under the LCPD closing prematurely.

31. Do you have views on the role that auctions or tenders can play in setting the price for a feed-in tariff, compared to administratively determined support levels?

ATH is not opposed in principle to FIT auctions but considers that they will be extremely difficult to design against a background of constantly developing and improving technology. Different projects will not reach given stages of development simultaneously with the potential for auctions to result in large-scale inefficiencies. Certainly in the initial states, FITs need to be administratively determined. Auctions might be introduced from, say, the mid 2020s as new technologies mature.

Can auctions or tenders deliver competitive market prices that appropriately reflect the risks and uncertainties of new or emerging technologies?

ATH considers this to be unlikely

Should auctions, tenders or the administrative approach to setting levels be technology neutral or technology specific?

ATH cannot see how these can be anything other than technology specific, certainly for FITs. Technological neutrality might be considered for capacity payments. It is also important to ensure that a mix of technologies emerges and that an over-dependence on any one technology, or group of technologies, does not arise.

How should the different costs of each technology be reflected? Should there be a single contract for difference on the electricity price for all low-carbon and a series of technology different premiums on top?

ATH considers this proposal has merit.

Are there other models government should consider?

As with the CCS demonstration project, there could be individual project negotiation, at least for larger projects and in the early stages of the development of a technology.

Should prices be set for individual projects or for technologies.

For early, large projects (e.g. early CCS projects), prices may need to be set for individual projects. As technologies mature, technology based projects may then become appropriate.

Do you think there is sufficient competition amongst potential developers/sites to run effective auctions?

Not in the early stages of the development of a technology (e.g. the CCS demonstration programme). Also, locational and other elements may be significant (e.g. length and size of CCS pipelines, 'first mover' issues).

Could an auction contribute to preventing the feed-in tariff policy from incentivising an unsustainable level of deployment of any one particular technology? Are there other ways to mitigate against this risk?

No. On the contrary, ATH considers that an auction process is more likely to incentivise particular technologies.

32. What changes do you think would be necessary to the institutional arrangements in the electricity sector to support these market reforms?

ATH has no comment.

33. Do you have view on how market distortion and any other unintended consequences of a FIT or a targeted capacity mechanism can be minimised?

ATH has no comment.

34. Do you agree with the Government's assessment of the risks of delays to planned investments while the preferred package is implemented?

It is imperative that the CCS demonstration is not delayed. To this end, there needs to be immediate clarification that carbon abated from CCS plants WILL receive relief from carbon price support and that some relief applies to the unabated proportions of such plant. With respect to the latter, ATH cannot see any commercial argument for investing in a CCS demonstration plant (even if the CCS element is fully funded) as opposed to an unabated gas plant.

35. Do you agree with the principles underpinning the transition of the Renewables Obligation into the new arrangements? Are there other strategies which you think could be used to avoid delays to planned investments?

ATH has no comment.

36. We propose that accreditation under the RO would remain open until 31 March 2017. The Government's ambition to introduce the new feed-in tariff for low-carbon in 2013/14 (subject to Parliamentary time). Which of these options do you favour:

All new renewable electricity capacity accrediting before 1 April 2017 accredits under the RO;

All new renewable electricity capacity accrediting after the introduction of the low-carbon support mechanism but before 1 April 2017 should have a choice between accrediting under the RO or the new mechanism.

ATH has no comment.

37. Some technologies are not currently grandfathered under the RO. If the Government chooses not to grandfather some or all of these technologies, should we:

Carry out scheduled banding reviews (either separately or as part of the tariff setting for the new scheme)? How frequently should these be carried out?

Carry out an "early review" if evidence is provided of significant change in costs or other criteria as in legislation?

Should we move them out of the "vintaged" RO and into the new scheme, removing the potential need for scheduled banding reviews under the RO?

ATH has no comment.

38. Which option for calculating the Obligation post 2017 do you favour?

Continue using both target and headroom

Use Calculation B (Headroom) only from 2017

Fix the price of a ROC for existing and new generation

ATH has no comment.

ANNEX

Carbon price floor: support and certainty for low-carbon investment Consultation response by ATH Resources plc

ATH Resources is an AIM-listed operator of surface coal mines and has mines in production in East Ayrshire, Dumfries and Galloway and Fife. The Company is one of the largest producers of coal in the UK, providing coal principally to the electricity supply industry and also the industrial and house coal markets.

ATH Resources (ATH) is pleased to respond to this consultation, which has major implications for its business, a business which is important for employment and the local economy in the areas where it operates.

As this is such an important issue for the UK coal industry in general and for ATH in particular, I have prefaced answers to the individual questions with some general overarching comments, summarising the main issues.

Effect on UK coal production

Coal production in the UK is a growth industry. Output has increased by some 8% over the last three years with a commensurate increase in employment and investment. The introduction of carbon-price support will bring this growth to a halt, and then reverse it, perhaps dramatically so. UK produced coal will be replaced by imported gas. These impacts are set out in more detail in responses to questions 5.D5 and 5.D6 below, where the rationale is explained in full.

Relationship with other Electricity Market Reform proposals

Whilst this is a separate consultation, it cannot be considered independently of the Government's other proposals for Electricity Market Reform (EMR) set out in the DECC consultation.

ATH cannot see how carbon-price support can provide any greater certainty for investment in low-carbon generation than the proposed introduction of feed-in tariffs (FITs) elsewhere in the EMR package. Carbon-price support can only be either (a) a revenue-raising measure or (b) designed specifically to encourage a switch from coal to gas-fired generation.

Effect on investment in fossil fuel generation

Carbon-price support will initiate a renewed dash for unabated gas. This may result in earlier carbon reductions but will emphatically not lead to a decarbonised electricity supply. On the contrary, it will lead to long-term carbon lock-in with a large volume of unabated gas-fired plant being available in 2030 and for many years beyond.

At the same time, carbon-price support will act as a major disincentive to investment in existing coal-fired generation plant to meet the requirements of the Industrial Emissions Directive (IED). As a result, this plant is likely either to have closed by the early 2020s or to be operating on very low load factors.

Effect on the CCS demonstration programme

Carbon-price support will also act as a major disincentive to the participation of coal-fired plant in the CCS demonstration programme. Relief from CCL in respect of carbon abated at such plants (and any subsequent CCS plants) is essential. However, continuing to charge CCL on the unabated proportion of such plants will be a major disincentive for the participation of coal-fired plant in the demonstration programme. ATH can see no reason for any generator to construct a partially abated coal-fired CCS demonstration plant in these circumstances. The lower cost option will always be to construct unabated gas-fired plant.

The consultation states at para 4.30 that “the carbon price support mechanism will not become a barrier to investment in such demonstrations” but does not explain how this is to be achieved for coal-fired plant. ATH cannot see why any electricity generator should wish to invest in a partially abated coal-fired CCS demonstration plant (other than in the first, now uncontested competition for the first such plant) without relief not only for the carbon abated but also in respect of the unabated proportion of such plant.

Overdependence on gas

The consequence of minimal investment in either existing or new coal-fired plants is a very low level of coal burn from the early 2020s onwards. This will have two effects. First, there will be the potentially dramatic effect on investment in coal production set out above. Second, there is a risk of a very high level of dependence on gas at that time.

ATH considers that the Government should carefully consider the security of supply implications of this in a period of peak demand on a cold, still winter day in the mid 2020s, the sort of weather conditions that typically occur two or three times every year. At that time, new nuclear plant is unlikely to have provided any more capacity in total; it will merely have replaced closing nuclear capacity. Whilst nuclear generation provides some 18% of total electricity supply, it is inflexible and will provide only some 12% to 13% of peak demand. Wind generation, however great the capacity, will be effectively zero. Pumped storage will supply 1% to 2%. In freezing conditions, hydro generation will be minimal. There may be a small contribution from some other, very expensive, renewables and dedicated biomass and landfill gas generation. It follows that dependence on fossil-fuel plant may well exceed 80%. If there is then very little coal-fired capacity, dependence on gas will be extremely high, at a time when residential and commercial gas demand is also at its highest.

ATH considers that this, by no means unlikely scenario poses unacceptable security of supply and/or price risks.

Imports of electricity – market distortion

ATH considers that the proposal to apply CCL to electricity exports but not to imports will lead to severe market distortion given the probable increase in interconnector capacity with perverse outcomes. Whilst interconnector capacity may still be relatively small compared with overall UK generation capacity, it will be much greater in relation to coal-fired capacity and generation in the mid 2020s.

Interconnectors are likely to be used more at peak periods, precisely the periods at which coal-fired generation, in the UK or Europe, will be providing marginal supply. Imported electricity, including electricity generated from coal, will thus displace UK electricity

generated from UK coal production. This represents a perverse effect. Imports of electricity would effectively be subsidised.

Accounting for CCL

ATH considers that the proposal that fuel suppliers account for CCL on fuel inputs is unnecessarily administratively complex, at least in the case of coal supplies. The electricity generators themselves will have to account for CCL on imported coal, at present more than 50% of supplies. It makes sense, therefore, that they should account for CCL on all coal supplies, including those from UK producers. The trade association of which ATH is a member, Coalpro, has explored this with the industry's electricity generator customers and it is believed that they, too, would prefer this approach.

The practical issues associated with CCL relief in respect of the abated carbon at CCS stations would be far more easily dealt with by adopting this alternative approach. It would be an administrative nightmare for generators and UK coal suppliers to have to agree between themselves (bearing in mind that several UK coal suppliers may be involved) what portion of the relief should apply to coal imports (to be accounted for by the generators) and what portion should apply to UK produced coal (to be accounted for by coal producers having first been apportioned between them).

Wider effects

From a wider perspective, ATH has concerns on the effect of carbon price support on the competitiveness of UK industry as a whole both directly and cumulatively in conjunction with CRC and CCL on electricity supplies. This will give rise to risks of carbon leakage on a large scale.

Conclusion

Responses to specific consultation questions are attached. It should be seen, however, from the general comments above, that these proposals, if carried through, will have a major impact on our markets and therefore on our business. ATH is currently a coal production business operating entirely in the UK, and contributing to UK employment and the UK economy. We may be able to compete in the international market, but what a perverse outcome it would be for us to have to export coal to Europe, for the electricity produced to come back through the interconnector, whilst our home market is replaced by imported gas. The raft of policy proposals contained in the carbon price floor and EMR consultations will certainly lead us to review our strategic options for the future.

I would ask Government to reflect on whether a renewed dash for gas – the certain consequence of these proposals – is what is really intended.

Responses to individual questions

Investment

3.A1 What are your expectations about the carbon price in 2020 and 2030? And how important a factor will it be when considering investment in low-carbon generation?

ATH does not have the expertise to express a view on the carbon price in 2020 and 2030. However, it is clear that it will be fundamentally influenced by decisions at a European level on whether to go further than is presently planned under the EU ETS to 2020 (i.e. whether to aim for a 30% rather than a 20% reduction in carbon emissions) and on the post 2020 regime.

It should also be noted that, to the extent that the UK takes unilateral action through the introduction of a carbon price support mechanism, this will reduce overall European emissions (subject to carbon leakage from the UK) and thus make the EU ETS price lower than it would otherwise have been.

If the EMR package introduces FITs for low-carbon generation, this will be the investment driver and the wider carbon price will have no influence.

3.A2 If investors have greater certainty in the future long-term price of carbon, would this increase investment in low-carbon electricity generation in the UK? If so, please explain why.

Yes, but only in the absence of other measures. If FITs are introduced, it is these that will provide the certainty. No additional certainty would be provided by any greater knowledge of the future long-term price of carbon.

3.A3 How much certainty would investors attribute to a carbon price support mechanism if it were delivered through a tax system?

There must always be concerns that measures introduced through the tax system would be subject to change as a result of wider government policy objectives and macro-economic considerations. In any event, the introduction of FITs via the other EMR proposals would provide much greater certainty. The carbon price support mechanism is unnecessary and irrelevant in this context.

3.A4 In addition to carbon price support, is further reform of the electricity market necessary to decarbonise the power sector in the UK?

This question is posed the wrong way round. It is the other elements of the EMR package, specifically the introduction of FITs, that will ensure the decarbonisation of the power sector. If these are introduced, then carbon price support is wholly unnecessary.

Against this background, carbon price support can only have two purposes: - (a) to raise revenue; (b) to promote fuel-switching from coal to gas. The latter might result in earlier carbon reductions, but will emphatically not lead to decarbonisation. On the

contrary, it is likely to result in a dash for unabated gas which will lead to long-term carbon lock-in beyond 2030.

Administration

4.B1 What changes would you need to make to your procedures and accounting systems to ensure you correctly account for CCL on supplies to electricity generators?

The electricity generating companies will have to account for CCL on imported coal, at present more than 50% of supplies. It makes sense, therefore, that they should account for CCL on all coal supplies, including those from UK producers.

This alternative approach would make it much easier to apply the tax relief for CCS power stations – see 4.C3 below.

4.B2 How long would you need to make the necessary changes to your systems to account for CCL on supplies to electricity generators?

See the alternative proposal set out at 4.B1 above. The electricity generators will have to make the necessary changes in any event to account for CCL on coal imports and overall administrative costs will be reduced if ATH does not have to do so.

4.B3 Please provide an estimate of how much the system changes would cost, both one-off and continuing?

The alternative approach set out at 4.B1 above represents a far better solution. It is likely that both one-off and continuing costs would be lower as electricity generators will have to incur these in any event to account for coal imports.

Types of generator

4.C1 Do you agree that all types of electricity generators should be treated equally under the proposed changes? If not, please explain why.

Given that the other elements of the EMR package, specifically FITs, do not, by their very nature, treat different types of generation equally, this question is redundant. The main consequence of the carbon price floor will be to offer a significant advantage for gas-fired compared to coal-fired generators and lead to large-scale fuel switching and a renewed dash for gas. The impact of this is dealt with more fully in the preamble to this response but will result in a very high dependency on gas in the mid 2020s, will be a major disincentive to investment in existing coal plant and in the CCS demonstration programme on coal-fired plant, and will lead to long-term carbon lock-in beyond 2030 at unabated gas plant.

4.C2 Is there a case for providing additional or more preferential treatment for CHP? If so, what is the best way of achieving this?

No.

4.C3 Do you agree that tax relief should be considered for power stations with CCS? If so, what are the practical issues in designing a relief; what operational

standards should a CCS plant meet in order to be eligible; and how might these issues differ for demonstration projects?

This is absolutely essential if CCS is to proceed, including the demonstration programme. Without such relief, there will be absolutely no economic case for any investment in coal-fired CCS plant.

The demonstration programme will establish criteria for operational standards and these should apply to all CCS plants. There should be no difference, at least until the technology has been proven and is commercially available, between demonstration and subsequent plants.

There are, however, wider implications for the CCS demonstration programme (see also the preamble above). The consultation document baldly states that “the carbon price support mechanism will not become a barrier to investment in such demonstrations” (para. 4.30) without any explanation as to how and why this should be so. If there is no relief for carbon emissions from the unabated proportions of CCS demonstration plants, this would be certain to act as a major disincentive to the demonstration programme. At the very least, any demonstration plant (other, perhaps than the winner of the, now uncontested, competition for the first plant) would now almost certainly be gas. No other coal-fired demonstration plant would be likely to proceed if there were no relief for the solid fuel CCL on the unabated portion of such a plant compared with the CCL for gas.

Imports and exports

4.D1 What impact would the Government’s proposals have on electricity generators and suppliers that export or import electricity?

The proposal to apply CCL to electricity exports but not to imports is perverse and will lead to severe market distortion given the probable increase in interconnector capacity. Whilst this might still be relatively small compared to overall UK generation, it is likely to be much larger in relation to coal-fired capacity and generation in the mid 2020s.

Interconnectors are likely to be used more at peak periods, precisely the periods at which coal-fired generation, in the UK or Europe, will be providing marginal supply. Imported electricity, including electricity generated from coal, will thus displace UK generated electricity from UK coal production. This even applies to France. Whilst the actual electricity imported from France may be generated by nuclear stations, this is only possible due to substitution within France by coal-fired generation at peak periods. This represents a perverse effect. Imports of electricity would be effectively subsidised.

ATH recognises that applying CCL to electricity imports would be complex, but this is no excuse for allowing a severe market distortion and a perverse outcome.

4.D2 What impact might the proposals have on trading arrangements for electricity?

ATH cannot comment on the effect on the trading arrangements themselves but the overall impact will be to drive fossil fuel generation from coal to gas with all the effects set out elsewhere in this response.

4.D3 What impact might the proposals have on electricity generation, trading and supply in the single electricity market in Northern Ireland and Ireland?

The effect will inevitably be to result in higher imports from Ireland or lower exports to Ireland.

Carbon price support mechanism

4.E1 How should the carbon price support rates be set in order to increase certainty for investors, in particular over the medium to long term?

The proposal in the EMR package for FITs will provide all the certainty required for low-carbon generation. Carbon price support rates, at whatever level and over whatever time scale, cannot add to that certainty.

However, carbon price support rates at any level will massively increase the uncertainty for coal-fired generators in making their investment decisions on how to comply with the IED. The higher the rates, the greater the uncertainty. The apparent requirement for CCS demonstration plant to pay the CCL levy on the unabated portion of their plants will massively, perhaps fatally, increase uncertainty for the participation of coal-fired plant in that programme.

4.E2 Which mechanism, or alternative approach, would you most support and why?

FITs, as proposed in the EMR package, represent a far more certain option to which carbon price support will add nothing. An alternative is a low-carbon obligation.

4.E3 What impact would the proposals have on your carbon trading arrangements?

ATH does not participate in carbon trading.

Future price of carbon

4.F1 Should the Government target a certain carbon price a) for 2020 and b) for 2030? If so, at what level?

A target carbon price is irrelevant and unnecessary to support the move to a decarbonised electricity system if FITs are introduced.

If a carbon price support mechanism is introduced, for other reasons, the target price should be maintained at low levels in both 2020 and 2030 if large-scale fuel switching from coal to gas, an excessive overdependence on gas, and long-term carbon lock-in at unabated gas plants are to be avoided (see elsewhere in this response).

4.F2 What is the most appropriate carbon price for the UK to meet its emissions reduction targets in the power generation sector? How would this be affected by changes in the structure of the electricity market?

If FITs are introduced as part of the EMR package, these alone will be sufficient to meet emissions reductions targets. The carbon price support mechanism may result in lower emissions in the short-term but are likely to result in longer-term carbon lock-in by promoting the large-scale construction of unabated gas-fired plant. Achieving longer term emission reductions targets from the late 2020s through to 2050 will become much more difficult.

4.F3 When would be the most appropriate time for introducing a carbon price support mechanism and what would be the most appropriate level?

A carbon price support mechanism is both irrelevant and inappropriate if FITs are introduced as part of the EMR package. If, for other reasons, a carbon price support mechanism is introduced, then the timing and the level at which it is introduced, should be designed to avoid an excessive switch from coal to gas with all the implications that entails (see elsewhere in this response).

Electricity Investment

5.B1 What impact would you expect the carbon price support mechanism to have on investment in low-carbon electricity generation?

None. FITs will be sufficient.

5.B2 What other impacts would you expect carbon price support to have on investment decisions in the electricity market?

There will be minimal investment at coal-fired plant to meet the requirements of the IED with consequent closures and low load-factor operation. There must be a question as to whether sufficient coal-fired generation capacity will remain to ensure security of supply objectives can be met.

The carbon price support mechanism will stimulate a dash for gas and large-scale investment in unabated gas-fired plant.

5.B3 How should carbon price support be structured to support investment in electricity generation whilst limiting impacts on the wholesale electricity price?

It is essential to ensure fuel diversity of supply if security of supply objectives are to be met. Carbon price support should therefore be structured in such a way as to not make it totally uneconomic for investment in existing coal-fired plant to meet the requirements of the IED such that a reasonable amount of such capacity remains in the mid 2020s. At the same time, it should be structured to avoid an excessive level of investment in unabated gas-fired plant and thus avoid an excessive overdependence on such plant in the mid 2020s (and long-term carbon lock-in). Only by ensuring a diversity of fuel sources can potentially very high and volatile wholesale electricity prices at peak periods be avoided.

ATH suggests that the Government gives very careful consideration to the potential situation in a period of peak demand on a cold, still winter day in the mid 2020s, the sort of weather conditions that occur two or three times every year. At that time, new nuclear plant is unlikely to have provided any more capacity in total; it will merely

have replaced closing nuclear capacity. Whilst nuclear generation provides some 18% of total electricity supply, it is inflexible and will provide only some 12% to 13% of peak demand. Wind generation will be effectively zero (ten or twenty times zero is still zero). Pumped storage can supply 1% to 2% but hydro output may be near zero in freezing conditions. There may be a small contribution from some other, very expensive, renewables and dedicated biomass and landfill gas plant. It follows that the dependence on fossil-fuel plant may well exceed 80%. If there is then very little coal-fired capacity, existing or new, (bearing in mind that the main source of biomass generation is coal-fired capacity), dependence on gas will be enormous, at a time when residential and commercial gas demand is also at its highest.

Existing low-carbon generators

5.C1 Can you provide an assessment of the impact of the proposals on your generation portfolio and overall profitability?

ATH has no comment.

5.C2 What would be the implications of supporting the carbon price for existing electricity generators and how should the Government take this into account?

Assuming that this generation applies only to low-carbon plant, ATH has no comment.

Electricity price impacts

5.D1 How do you currently manage fluctuations in the wholesale electricity price?

ATH has no comment.

5.D2 What difference will supporting the carbon price make to your business?

See response to 5.D5 below.

5.D3 As an electricity generator or supplier, how much of the cost of carbon price support would you pass on to consumers?

ATH is not an electricity generator or supplier, but would expect the full cost of carbon price support to be passed on to consumers.

5.D4 As a business, how much of the cost of energy bills do you pass on to customers?

Coal prices are wholly determined by the international market. Coal producers are therefore unable to pass on any cost increase, from whatever source, which is not also incurred by our international competitors. Higher electricity prices as a result of carbon price support could not therefore be passed on to customers.

5.D5 How might your company or sector be affected and would there be any impact on your profit margins?

ATH operates surface mines. The main obstacle to surface mine development is planning. As a result, surface coal mine producers have a portfolio of sites at various

stages of development. From initial identification of a potential reserve to eventual production through a demanding and time consuming planning system could typically take up to ten years.

The overall impact of carbon price support will be the replacement of UK produced coal by imported gas. If the market for coal in the 2020s proves to be higher than we fear, UK produced coal will be replaced by imported coal.

Despite high international coal prices, there may still be pressure from electricity generators on UK coal producers to reduce prices in an attempt to offset the effect of carbon price support. This would impact on profit margins and may reduce output further.

This will lead us to review our strategic options for the future and whether the UK remains an attractive place for investment. The market uncertainties arising from the carbon price floor and EMR policies are likely to lead to a curtailment of development effort and expense on potential longer-term surface mines within the portfolio. Surface mine output is likely to fall in the medium term

ATH urges the Government to carefully consider the wider economic implications of the impacts on UK coal production.

5.D6 Do you have any comments on the assessment of equality and other impacts in the evidence base of the Impact Assessment, included at Annex D?

The Impact Assessment takes no account of the negative effect on coal production, the consequent loss of jobs and other economic benefits (including tax revenues) and the cessation of investment.