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20 September 2001

Dear Nick,

Energy Policy Review

Please find enclosed TXU Europe's response to the Energy Policy Review. I am sorry that we are a few days late; we felt that to do justice to the topic, we should first conduct our own internal review of the issues to inject our response with fresh thinking. Our response is structured as follows:

- Our main response (8 pages)
- Annex A: The list of our twenty recommendations (2 pages)
- Annexes B and C: More detailed information on coal, renewables and Europe

In reviewing the issues, we have been driven to the conclusion that an expansion of zero carbon generation is inevitable and that renewables (beyond the 10% already committed under the Renewable Obligation) look a much better bet from a market perspective than nuclear. We continue to have concerns about the increasing dependence on (soon to be) imported gas, because of the risk of price shocks and (potentially) physical supply problems in a commodity available from few sources over few transport routes.

We believe that the 27,000 MW of existing coal fired plant in England & Wales has a crucial role to play as the *de facto* guarantor of our electricity supply security. While its long term average load factor will need to fall for environmental reasons, the capacity is ideally suited both to backing up renewable generation and to providing a real insurance policy against cost or physical problems with gas. There is nothing else even remotely capable of performing this role on this kind of scale at an acceptable cost.

Our main concerns and recommendations are therefore aimed at improving the prospects for renewables (well beyond the 10% currently targeted), and maintaining

a role for the coal plant. For renewables, our suggestions include improvements to the planning system and a much stronger preference in power station consent policy for CHP and renewables over other forms of generation.

We believe that, on a technical level, the coal plant could last more or less indefinitely with suitable maintenance. We have identified the current structure of grid connection charges and business rates as a particular threat to the continued availability of low load factor coal plant and suggested that this is addressed urgently. Further progress is also needed in ensuring that environmental regulation and energy policy fit together so that environmental improvements in areas such as SO_2 and NO_X can be achieved more cost effectively. We have suggested that the clean coal technology programme is refocused to look at carbon dioxide removal and storage from existing plants.

We have urged the continuation of a market based approach to energy policy and re-affirmed our support for the excellent work the Government is doing on liberalisation in Europe. We have identified the gas market as a particular area where more work is needed.

We support appropriate action on the demand side, using market based approaches where possible. We would also like to see further action in the transport sector.

We would welcome an opportunity to meet with you or with others in the PIU team to discuss the issues in this paper and any other questions where you felt our views would be useful. I am copying this letter and attachment to Anna Walker and colleagues at the DTI.

Yours sincerely,

Rupert Steele

Vice President, Corporate Strategy

TXU Europe Submission to PIU Energy Review

September 2001

1. TXU Europe welcomes the opportunity to contribute to the PIU's Energy Review. We believe that the review is taking place at a timely moment, when we can take stock of the considerable benefits brought by liberalisation and chart a way forward for the future.

2. We believe that a key aim of the review should be to integrate energy and environmental policy more closely, so that energy policy is more closely directed to meeting environmental challenges and environmental policy is formulated, costed and put into effect in a clear energy policy context. Achieving this would help deliver secure diverse and sustainable supplies of energy at competitive prices, which we believe continues to represent an appropriate policy goal.

Carbon and renewables

3. Looking to the future, it seems inescapable that carbon emissions will need to fall and that energy policy needs to focus on this as a central assumption. While some of this will be achieved by measures on the demand side (especially in sectors such as transport), we think that the main focus of policy needs to be on the supply side.

4. We believe that the best long term route for delivering what is required is a significant and sustained expansion of renewable energy as this will both deliver the required environmental improvements and avoid excessive dependence on imported gas supplies. We think that renewables are more likely to be deliverable than the nuclear alternative – even where the unit cost may appear slightly higher – because the political and financial risk factors are inherently lower. Renewables are also more attractive as a competitive market solution because more players have the capability to deliver them.

5. The long term aim, we believe, should be to create circumstances where renewables are able to grow as an energy source with little or no subsidy and to this end we support the renewables obligation as a mechanism to develop the market for the next 15 years or so. Beyond that period, we believe that technological improvement should enable the extent of support to be progressively wound down providing the market conditions are right.

6. In particular, this means that we need to create market space for renewable generation (offshore wind looks the most promising technology) to increase not just to 10% of the market, but in time to 30% or more. Such an outcome would not only reduce emissions but leave the UK with a substantial slice of its electricity market supplied from a source independent of oil or overseas monopolies. However, this outcome would be prejudiced if there was a new dash for CCGT plant and to this end we think that the Government should adopt a more rigorous approach to consents, favouring renewable and CHP developments and only giving permits for CCGTs and other plant where renewables and CHP are not available in sufficient quantities. It should not be sufficient for a developer to show that a CCGT is the most economic option for him. The alternative would be to accept that renewable generation can never find a natural place in the market and must always be forced by quotas. We do not think that is the right long term outcome.

7. It would also reduce the opportunity for renewable generation if the lifetimes of the magnox stations were extended. Whatever the merits of new nuclear build, TXU regards magnox as part of the history of nuclear rather than the future. In particular, the plants are not ideal as respects environmental performance, generating much higher quantities of nuclear waste and plutonium than more modern plants and requiring high marine emissions from Sellafield when the fuel is reprocessed. We therefore think the present schedule for their closure should be maintained or, where the economics justify it in the case of individual plants, accelerated as and when operational matters require excessively expensive repairs or long outages.

8. We support Ofgem's decision not to change the rules for NETA, as some have suggested, to avoid the balancing market from applying to renewable generation or CHP. As these sources of generation become a larger part of the mix, it will become increasingly difficult to balance the system economically if special rules are applied. Furthermore, the balancing market should be in the long run the most efficient way to deal with these issues; we think it is best to improve operation of that market rather than take trades and liquidity off-market.

9. The scope for onshore renewables can be improved by streamlining the planning system, particularly in England and Wales. There are plenty of opportunities for the kind of small project that characterises a lively and successful market, if the planning obstacle can be overcome. In Scotland, where the planning environment is easier, the wholesale electricity market duopoly held by Scottish Power and Scottish & Southern effectively prevents other players from entering the onshore renewables market. This is clearly prejudicing growth and innovation in the sector and we strongly support measures such as BETTA to address this.

10. In order to address the planning issue, we believe that the existing national guidance (PPG22 in England or TAN8 in Wales) should be updated to the more positive stance along the lines of the Scottish policy NPPG6. Furthermore, template

Supplementary Planning Guidance notes (SPGs) should be provided to District Councils so that a simple framework of standard policies can be adopted in most cases, reducing the amount of bespoke planning debate. It would also be desirable to find a way to bring together regional renewable assessments, regional planning guidance, County Structural plans and District policies. This might involve new legislation to set capacity targets by region or possibly the determination of renewable planning applications at County rather than District level.

11. We do not favour the suggestion, made occasionally, for the section 36 national planning system to apply to much smaller renewables. We think that such a move might strain the relationship between local and national authorities, perhaps leading to local authorities to object to most applications, forcing public inquiries. Also, feeding numerous small projects through a single resource at the DTI could lead to bottlenecks.

12. We believe that the operational implications for distribution networks of a substantial increase in embedded generation such as renewables are readily manageable if planned for. Planning should be put in place in a timely fashion, but we think some interests with a negative stance on renewables are over-stating the issue.

Security of supply

13. The related major issue – both in the context of increasing renewables and in its own right, is security of supply. As respects renewables, they improve security by reducing dependence on (soon to be) imported gas but clearly have their own security issues. Wind, in particular, cannot be relied upon to generate at any particular time of day and it is possible for still air to affect a large part of wind generation for several days. Hydro power is subject to seasonal rainfall variations. Nuclear is susceptible to generic safety issues arising which may require output restrictions from a whole fleet of stations while they are resolved. All these technologies must be backed up by flexible generation if they are to contribute to Britain's energy security.

14. By far the major source of flexible backup power currently operating in the UK is the coal fired generation sector. There are currently some 27,000 MW of coal capacity in England and Wales, most of which now operates flexibly. Coal is well suited to this role as it can be stockpiled cheaply at the stations and utilised when needed. It is easy to match the regular output from coal mines with the peaky requirements of flexible plant.

15. The quantity of energy stored in the coal yards of existing plant is orders of magnitude greater than that in all other storage mechanisms available or in contemplation. The coal sector is therefore an ideal back-up for renewables with capacity to deal with the unpredictability of any conceivable amount of renewable plant. At a technical level, there is no reason why the lives of these plants cannot be extended indefinitely with a moderate amount of maintenance investment.

16. More generally, on security of supply, the main issue is clearly the likelihood of increased dependence on gas. Given the low capital cost of CCGT plant, it is clear that in the absence of a policy response, this could become the primary source for the overwhelming majority of electrical power in the UK. It could be expected to replace the nuclear stations as they are retired, cover much of the increase of demand and replace the coal stations which may be forced out of production as a result of the EU large combustion

plants directive or other future environmental legislation which is not properly integrated with energy policy. Demand for gas has already risen sharply as CCGTs have been built and it seems inconceivable that the UKCS will be able to cover the current level of demand for more than a handful of years – let alone the level to which demand could rise.

17. A continued dash for gas would therefore leave the UK increasingly dependent on imported gas for its energy requirements. In the short term, this is likely to raise gas costs, both because we would be buyers from the monopolised Continental market and because the costs of upgrading Transco's system would need to be covered. Beyond those immediate costs, there are wider risks. Although there are strong commercial pressures for suppliers to be reliable and the political situation in Russia is more favourable than it was, say, 15 years ago, there is an inherent vulnerability in being dependent on a single fuel which comes from few sources via limited and non-flexible transport infrastructure. Although LNG may in principle help reduce the vulnerability of gas to transport issues, it requires major investment in terminals before it is available for use.

18. The 27,000 MW of existing coal fired plant goes a long way to underwriting the UK's security of supply against these issues. It greatly increases the resilience of the electricity system against any problems in gas supply and provides an important element of economic protection for electricity consumers should the price of gas spike. Moreover, the coal plant provides load following and frequency response which is simply not provided by the existing CCGTs and which would require significant investment by Transco to achieve the necessary flexibility of gas delivery.

19. While UK plants work best on a diet of UK coal, there are options for use of international coal. This coal comes from a diverse mix of countries, several of which are OECD members, and which are not correlated with the countries involved in supply of gas to Europe. Transport logistics for UK and international coal are again separate from the gas pipelines and coal generation is given further resilience by the on-site station stocks.

20. We recognise that, in order to achieve environmental gains, the long term average utilisation of coal-fired capacity will have to fall. Some reduction of installed capacity may be a consequence of this. However, failure to maintain a substantial stock of coal-fired capacity would not only remove the most effective back-up for renewables, but it would diminish considerably the optionality available to the nation's electricity system. There are a number of practical steps that could be taken which would help maintain as much of this capacity as possible.

21. Perhaps the simplest such change would be to alter the incidence of business rates and use of system charges, both of which are levied according to plant capacity rather than utilisation. We regard this as unfair, in that low utilisation plants provide a valuable service to the rest of the system and indeed to the nation generally by being available. Charging pro rata to utilisation would be much fairer.

22. To take an example, our High Marnham plant has a total rates and use of system bill of £8.5m a year. On a 20% load factor, it would generate 1.65TWh of electricity, so these charges would amount to £5.15 per MWh (as against an average price of electricity of around £19/MWh). If the charges were pro rata to utilisation, they would be nearer £1.50 per MWh. On a 10% load factor – not impossible in a peaking role – the plant would face a charge on the current basis of over £10 per MWh generated. This difference

– of several pounds a MWh – would be likely to make a significant difference to the viability of maintaining low utilisation plant in operation and to the ability of coal to act as a back-up to renewables. It is important for the change to be made urgently – waiting for the next rating review in 2005 could mean that much of the capacity had already closed.

23. The other valuable step would be for Government to continue to focus closely on environmental regulation relating to coal plant to ensure that the necessary environmental standards can be delivered at an affordable cost. Otherwise there is a risk that the future operation of mid merit and peaking coal plant may be inhibited, which would in turn impact on security of supply and the availability of cost-effective backup power for renewables. This work needs to encompass a number of themes.

24. The first necessary theme is a drive for stability in environmental standards and an avoidance of constant fine-tuning and the associated micro-management of plant operations. This approach is resulting in an increase in costs without commensurate environmental benefits. For example, to avoid this problem we are working with the Environment Agency in developing a market-based process for regulating NO_X emissions; the draft report of the Agency's consultants indicates that the cost benefit of this compared with the Agency's "traditional" approach could be tens of millions of pounds a year.

25. The second theme we would encourage is a positive approach, where standards have to change, aimed at promoting competition and continued operation in the coal-fired sector. The Agency's work in 1998 and 1999 to develop the concept of flexibility to incentivise the development of FGD and intensive use of FGD plant while maintaining competition in the coal-fired sector has been an excellent example of advancing energy policy, environmental policy and the promotion of competition. This work now needs to be built on to develop a post-2005 framework for sulphur which continues the benefits of flexibility. Ideally, this framework should also incentivise further FGD installation, including on plant where the full limestone/gypsum process is not suitable or economic, but where valuable improvements can be obtained by other methods.

26. The third theme we would stress is the need to focus on ensuring that energy and environmental policy are brought together in setting new environmental standards, so that improvements are cost effective and do not prejudice security of supply. Careful cost benefit analysis should be applied to any new standards. It is also important to avoid the temptation to "gold-plate" the obligations laid down by EU legislation.

27. On the specifics of the large combustion plants directive, we believe the Government needs to act pro-actively to develop a national plan which avoids the need, so far as possible, for expensive abatement options like Selective Catalytic Reduction so that there is the greatest chance that necessary environmental improvements can be remunerated by the market. Where this is not possible, Government should consider making resources available on a level playing field basis to fund improvements so that diversity and security of supply can be maintained in the face of regulatory burdens.

28. In the longer term, there may be benefits from developing carbon dioxide removal and storage technology for coal-fired power generation. This is an area which has not been studied much to date and which needs further development. Intuitively, it seems likely that the best value for money would come from adapting suitable existing stations (or indeed other large point sources of CO_2) rather than building new ones, though not

enough is known to have a clear view on this. Although the technology is unlikely to be viable without Government support, it seems a sensible precaution as a first stage for the Government to undertake a significant research and development effort in the area by refocusing its clean coal technology programme.

Investment

29. Also key to the security of energy supplies is creating an environment which will allow investment to be made, both in new plant where needed and in necessary environmental improvements to existing plant. The last few years have seen huge strides in the cost efficiency of generating plant and strongly falling wholesale prices as the pressures of competition have been brought to bear. TXU is proud to have been a part of this process as the first new owner of coal fired plant after the National Power/PowerGen duopoly.

30. However, we are concerned that returns have now fallen to levels which will not remunerate investment and that this could lead to a boom/bust cycle in electricity of the kind which characterises a number of capital intensive industries. To put it more crudely, if generation returns are below new entry costs for a sustained period of time, that will inevitably put pressure on supply security. That risk is enhanced considerably by the environmental regulation (especially from the EU) requiring investment at existing stations. While boom/bust may be the outcome in other sectors, we doubt whether it would be desirable economically or politically in electricity generation.

31. The abolition of capacity payments under NETA has increased the pressure in this area by increasing the vulnerability of existing low utilisation plant, making it harder for such plant to cover its fixed costs. We have discussed above some adjustments to rates and use of system charges which could go some way toward ameliorating this problem, but even so the system will depend on generators being able to charge apparently high prices during occasional periods of shortfall. To the extent that the ability to charge such high prices is (or is perceived to be) subject to regulatory pressure, one can expect the necessary investment to be less attractive. Clearly, the proposed modification of generation licences to secure "good behaviour" by generators may be interpreted by many as a signal that such pressure will be applied. That perception alone may be sufficient to see available investment monies re-directed to other sectors where satisfactory returns are seen as less subject to regulatory pressure.

32. We therefore believe that the Government and Regulator should recognise, both in stated policy and actions, their recognition of the need over time for investment in generation to be remunerated, and that short run marginal cost pricing is not a goal consistent with security of supply.

33. Another factor which will affect the willingness of companies to invest in generation assets is the perceived level of regulatory risk across the piece. For example, the attractiveness of investments to extend the life of coal fired stations will depend on a judgement of whether new environmental requirements are likely to require further investment. A stable framework of regulation, with the minimum of intervention and all new obligations specified well in advance is essential to optimise the framework for investment in generation.

Making markets work

34. Although we think that the Government will have to give some attention to the fuel mix in generation capacity, we now rely substantially on the market for our security of supply. It is therefore most important that the market works well both in the UK and more widely in Europe. Any measures the Government takes as a result of the Review need to work in a market context and need to be structured in a way which does not allow continental opponents of liberalisation to claim that the "experiment" has failed.

35. The Government should continue to support the Commission's new proposals for revised gas and electricity directives. These proposals should be strengthened where possible, in particular by improving access to ancillary services and by seeking an obligation for automatic customer registration systems to be established.

36. The electricity market in England and Wales is now fully competitive and should work well subject to measures to maintain the diversity of fuel mix and ensuring that economic and environmental regulatory overhang does not deter investment. There are however significant problems in Scotland (referred to earlier) and Northern Ireland. This impedes the transmission of price signals in these markets, reducing the prospects for stable, secure supplies. The Government should move to a fully competitive market in both countries.

37. More significant are distortions in the gas market – both in the UK and in Europe. On the UK side, there is insufficient transparency in respect of deliveries of gas from offshore. We think that this problem should be addressed and that the best way to do so would be for Ofgem to be given an offshore remit so that a holistic view can be taken of the operation of the gas market both sides of the beach.

38. The European gas market is however a much tougher nut to crack. We have seen how the supply of gas remains largely tied up in long term contracts (ostensibly taken up for security of supply but in fact having as their main effect locking up the market) and how these have caused Continental gas prices to rise sharply with the price of oil. We do not believe that such long term agreements do in fact achieve much in security terms and certainly not enough to justify the real and continuing cost of maintaining effective monopolies. Such monopolies do however secure that all costs flow to customers regardless of the wisdom of the original purchasing decisions.

39. We think the Government should strongly encourage the Commission to press on with gas liberalisation, including the steps being undertaken to end the so-called "destination" clauses and to seek the permanent abandonment of the Norwegian joint sales arrangements that were suspended in June 2001. Another major step which must be raised up the Commission's agenda is the need to undertake a major gas release programme in Europe. As the UK found in the early 1990's, such a programme is essential in order to break the logjam caused by the incumbents restricting access to gas supplies.

40. In promoting all this EU legislation, the Government will wish to be aware of the risk of "backwash" – ie the risk that solutions required in order to force open essentially closed markets could be ill-adapted to markets that are already fully open. An appropriate degree of subsidiarity should be provided to avoid this, without diluting the move to liberalisation. Similarly, TXU does not support full tax harmonisation for energy, though

there would be merit in some administrative simplifications, for example a zero VAT rate on HV cross border trade. The present system is complex to administer and this is hindering the development of the trade.

Demand side issues

41. Although we believe that the major focus in achieving the twin goals of a cleaner environment and secure supply will need to be on the supply side of the energy picture, there is a great deal of valuable work that can be done on the demand side, not only in the "utility" industries of gas and electricity but also in other sectors such as transport. There is, for example, considerable scope to improve the fuel efficiency of road vehicles.

42. In gas and electricity, there are three main ways to improve end user efficiency. Efficiency can be improved by regulatory measures, such as improved building standards or obligations on energy suppliers to fund efficiency programmes; it can be improved by Government spending programmes, such as HEES; and it can be improved by harnessing the market. TXU believes that all three approaches have a valuable role to play.

43. Harnessing the market, though enabling companies to compete in energy services rather than just energy products, is the approach which could bring the biggest rewards at the lowest cost. We at TXU have already made a major inroad into this through our Staywarm product, which now has nearly 250,000 accounts in operation. By providing all an eligible customer's energy needs at a fixed cost, we have the incentive to help the customer save energy. The usual dynamic, under which we have an incentive for the customer to use more, is reversed. We believe that the market will increasingly focus on these kind of innovations as customers tire of competition based only on small differences in price.

44. However, the ability for products like Staywarm to help with energy efficiency is currently limited to minor improvements such as advice, draught-proofing and low energy light bulbs. The ability to offer significant investments is hampered by the rule which enables domestic customers to switch supplier at 28 days notice (since if the customer switches the ability to recover the investment is impaired). We recognise, however, the important consumer protection which is afforded by this rule and would not support its abolition. But we think there is scope for some relaxation of the 28 day rule, in carefully defined circumstances where material energy efficiency investment is made, in order to help establish a more effective energy services industry. Safeguards would clearly be needed to ensure that the system was not abused with cosmetic energy efficiency offerings used as a means of locking in customers for long periods. There is already a partial relaxation of the 28 day rule for gas. Although it does not seem very effective as currently defined, it could be built upon to create a more effective regime applicable to both fuels. Careful consultation will be required, particularly with Energywatch, to ensure that consumer protection is maintained.

45. While harnessing the market remains the long term goal, TXU recognises the need in the interim to improve matters through regulatory processes. We have been a strong supporter of the energy efficiency standards of performance to date as well as action in other sectors (such as building standards) to improve efficiency. The new Energy Efficiency Commitment which is due to commence in April 2002 requires suppliers to achieve more than a threefold increase in savings per year compared with the existing

standard. This is a challenging requirement and we expect it to lead to significant learning as to what can be economically achieved as well as substantial carbon savings. Given that the costs of this programme flow through to consumers, we think that the learning should be gained from this enhanced programme before any possible further enhancements are considered.

46. TXU is a strong supporter of HEES and indeed is the only utility to have won a HEES delivery contract. We believe this work will both benefit the environment and reduce the impact of fuel poverty. It is a valuable programme which is improving health and the environment.

47. Annexes on our summary of recommendations, additional information on coal & renewables, and on market solutions are attached.

20th September 2001

ANNEX A

SUMMARY OF RECOMMENDATIONS FROM TXU EUROPE

1. Energy and environmental policy should be integrated more closely

2. The role of renewables in the UK's electricity generation mix should be enhanced over time well beyond the 10% currently planned; policy in the longer term should be directed toward achieving this with a reducing requirement for Government support.

3. The Government should apply a more rigorous approach to future power station consents, favouring renewables and CHP, and only approving other new plant where necessary after alternatives have been thoroughly explored. It should not be sufficient for the developer to establish that a CCGT is the most economic option for him.

4. NGC use of system charges and business rates should be altered at an early date to be pro rata to energy delivered and not pro rata to capacity.

5. The lives of the existing magnox nuclear stations should not be extended and early closure should be considered in the case of individual plants where lengthy shutdowns or expensive repairs make continuing operation uneconomic.

Renewables

6. The balancing market is the most efficient way to match the unpredictability of renewable generation (and CHP) with the back-up power available from other sectors and NETA rules should not be changed to exclude renewables and CHP from balancing.

7. The planning system for renewables in England and Wales should be streamlined. In particular, the national planning guidance for renewables needs to be updated for England and Wales so as to be in line with the more positive Scottish system and District Councils encouraged to adopt standard policies to reduce the bespoke negotiation on small developments. Further initiatives, possibly including targets for renewable development, should be considered. The offshore planning environment for wind should also be improved.

8. Access to the Scottish wholesale electricity market should be improved; the BETTA programme should be implemented and further steps to break up the Scottish duopoly actively considered.

Coal

9. The Government should strive for a stable, pro-competitive approach to environmental regulation which minimises costs while delivering the necessary improvements. It should apply careful cost benefit analysis to new environmental requirements for coal fired plant to ensure that any new requirements are justified and can be remunerated in the market. Where this is not possible, Government should consider making resources available to meet such requirements so as to enable security and diversity of supply to be maintained.

10. The Clean Coal Technology programme should be re-focused in order to study CO_2 capture and storage in relation to existing coal plants or other large CO_2 point sources.

Markets and investment

11. Government and Regulator should recognise, both in stated policy and actions, their recognition of the need over time for investment in generation to be remunerated, and that short run marginal cost pricing is not a goal consistent with security of supply.

12. Effective energy markets should be key to the Government's policy, though the Government will need to maintain a role (eg through consents policy) in the development of the fuel mix for generation capacity.

13. Any measures the Government takes as a result of the Review need to work in a market context and need to be structured in a way which does not allow continental opponents of liberalisation to claim that the "experiment" has failed.

14. The Government should continue to support the Commission's new proposals for revised gas and electricity directives. These proposals should be strengthened where possible, in particular by improving access to ancillary services and by seeking an obligation for automatic customer registration systems to be established. Cross border trading in electricity should be facilitated by setting a zero rate of VAT on HV cross border electricity flows.

15. The Government should move to full retail competition and effective wholesale markets for electricity and gas in Northern Ireland.

16. Ofgem should be given an offshore remit in order to secure that the UK gas market works as well and transparently offshore as onshore.

17. The Government should encourage the Commission to press on with specific gas liberalisation measures, including ending destination clauses and keeping the GFU closed down. A gas release programme on the Continent is an essential component of self-sustaining competition.

Demand side measures

18. The transport sector should bear its full share of carbon dioxide reductions. In particular, further progress should be made on road vehicle fuel efficiency.

19. The 28 day rule should be retained as a valuable consumer protection, but some fine tuning to allow limited exceptions for significant energy efficiency measures should be considered.

20. The focus should be on market led energy efficiency measures; learning should be gained from the new Energy Efficiency Commitment (more than a threefold increase on previous programmes) before next steps of that kind are considered.

ANNEX B

COAL AND RENEWABLES – ADDITIONAL INFORMATION

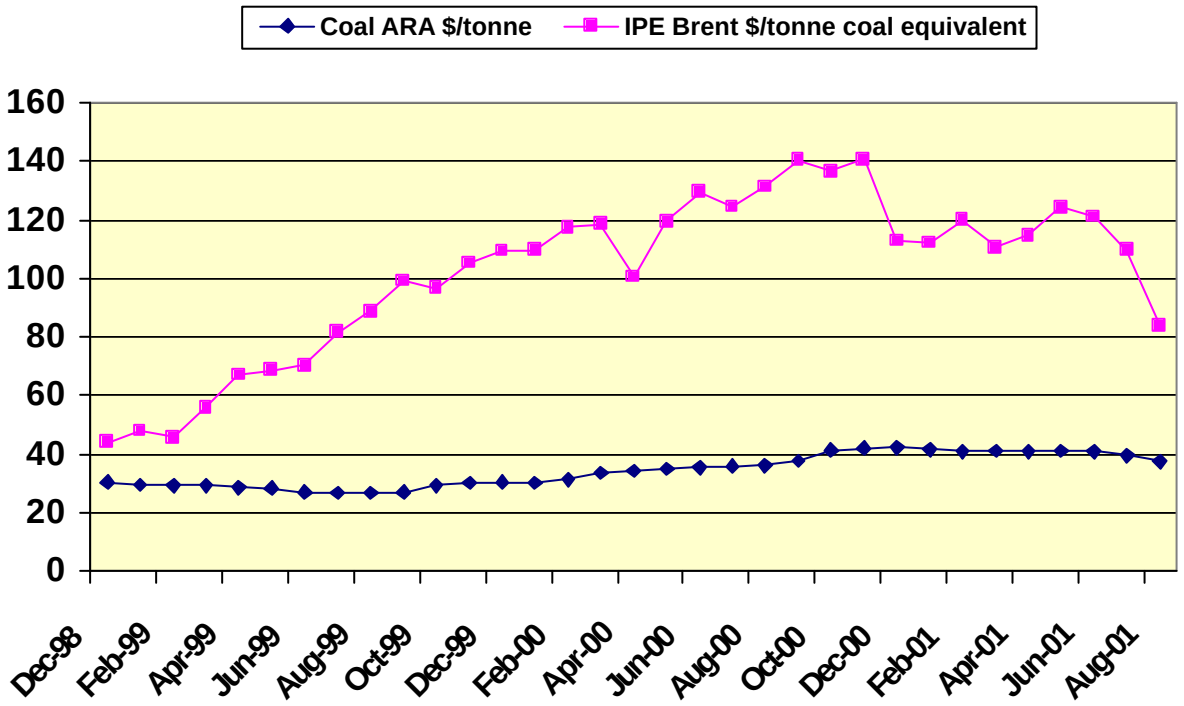
Coal pricing

The price of coal, especially in international markets, is determined by the balance of supply and demand in its markets and is only loosely linked to oil prices. At some periods of low oil prices in the past, there has been some linkage through the trade-off between coal and heavy fuel oil for power generation, but this link has receded as heavy fuel oil has become much less used for generation.

There is a direct cost link because of freight costs. Some 20-30% of the cost of international coal is the cost of freight and freight charges are slightly correlated to oil prices – say 25%. The overall linkage from this route is therefore low (say 7%).

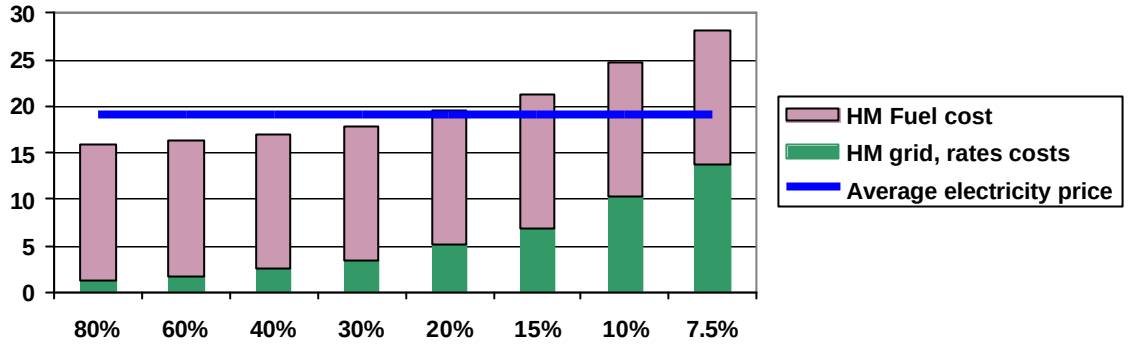
Traditionally, the price of coal has moved in 7 year cycles within the range US$ 25-45 a tonne. The last high in these cycles was in 1995 and the corresponding low was in 1999. Since then we have had a rapid rise to $43 and we think prices are beginning to fall back again. It is thought that the cycle may be beginning to change – perhaps accelerating as a paper market evolves.

In any event, as the graph below illustrates, coal is sufficiently weakly correlated in price with oil to provide a valuable hedge in economic as well as physical supply terms.



Impact of rates and connection charges at High Marnham

The graph below shows the impact per unit of grid connection charges and rates at a range of different load factors. Even leaving aside station operations and maintenance costs, rates and connection charges are a major component of the cost at low load factors,



potentially equalling the cost of the fuel, and are sufficient to put the station's costs above average electricity prices. This leaves the station's viability (and that of all other low utilisation coal-fired plant) increasingly at risk and dependent on precise targeting of the highest price peaks.

Renewables obligation

TXU will be responding to the renewables obligation statutory consultation in due course. Subject to points of detail, TXU believes that the Renewables Obligation is an appropriate market-based method of encouraging renewable generation. We also believe that the revised proposals successfully deal with a number of loopholes which we had identified in our original consultation response. Given the scale of the task, we feel it is important for the Government to signal clearly the urgency of proceeding. To that end we believe the obligation should come into effect on 1st January 2002 (or, if that is not possible, 1st February 2002). There seems to be no need to await 1st April 2002 and we think that to do so would send an undesirable signal.

Renewables development framework

The challenge, as discussed in our main response above, will be to create the onshore and offshore development framework which will allow these testing targets to be turned into reality and then exceeded.

We feel that the Crown Estates Commissioners should redouble their efforts to promote offshore wind generation. This affects both the number and size of sites made available, and also the terms of development. We have been concerned, for example, by proposed terms relating to guarantees which are unlikely to be acceptable to project financiers.

ANNEX C

MAKING MARKETS WORK

UK experience over the last 15 years has shown that secure and reliable supplies of energy are best provided within a competitive market framework that is able to provide consumers with low prices and clear price signals. Recent action by the Government and Ofgem has sought to strengthen the role of markets (e.g. replacement of the Pool by NETA) and to remove residual market imperfections, (e.g. legal separation of monopoly from competitive activity in electricity).

However, emerging markets cannot simply be assumed to work effectively and Governments should review their operation, identify potential imperfections and take appropriate action.

During the last 15 years the UK has been largely self-sufficient in energy terms. This is expected to change during the next 10 years as indigenous oil and gas production begins to reduce and energy is imported from mainland Europe and elsewhere. Against this background TXU believes there are three key issues for the UK Govt to consider:

1) removal of residual imperfections in the UK energy market;

2) promotion of effective competition in the energy markets of mainland Europe; and

3) addressing those imperfections in the European market which will impact the UK.

These are addressed in turn below.

1) Removing residual imperfections in the UK energy market

At present, a less than optimal competitive situation exists in the Scottish and Northern Irish electricity markets. Both are characterised by a high degree of vertical integration, inadequate wholesale arrangements with a high degree of market concentration, restricted interconnector access and a lower level of retail competition than exists in England and Wales. As a result, we believe that price signals (both to customers and to prospective producers/importers) are less sophisticated than in England and Wales and the prospects for security of supply are therefore less stable. Improvements in the Scottish and Northern Irish electricity markets should be priority issues for the UK Government.

The last two years have shown clearly that the European gas wholesale market is characterised by imperfections (with price rises ultimately determined by reference to OPEC targets). However, these price rises have also highlighted a considerable lack of transparency in respect of deliveries of gas from UK production fields to the onshore transportation system. It is TXU's view that greater transparency is needed if gas suppliers and shippers are to be able to properly value the different forms of gas flexibility (e.g. Daily Flow Notifications (DFNs) and producer flows offshore) and to develop price signals that accurately reflect the costs that customer demands place on the production and storage system. Such price signals are critical in order to ensure the best possible security of supply and are particularly important when sources of flexible gas are the subject of a

relatively high degree of concentration. The situation would also be improved if Ofgem were given greater role in the regulation of offshore fields, separate from the current licensing role of the DTI, to eradicate residual market imperfections.

2. The promotion of effective competition in Europe

Optionality and flexibility coming from liberalised, liquid EU markets is critical to UK energy security and forward UK energy prices.

As a significant trader of energy products in many parts of Europe, TXU is encouraged by the support provided to the European liberalisation process by the UK Government. The UK's practical experience of successful market liberalisation has undoubtedly provided an important underpinning for pro-liberalisation forces in Europe. We look to the Govt to continue this effort and to support the continuing export of UK know how.

In addition, we believe security of supply in the UK will be improved through the more efficient operation of the European market, as a result of greater trade between Member States and the enhanced diversity of supply that will result from an increased number of suppliers and competing energy sources.

In this context it is of some importance that the Energy Review should not recommend or lead to UK Government market interventions that can be falsely promulgated by large incumbent EU players as `good examples of where a liberalisation experiment has failed and that European Commission (EC) efforts to accelerate liberalisation are misplaced'. This could hinder the gas and electricity liberalisation process that is critical to UK energy security and UK energy prices and it is important that the PIU and UK Government make a conscious effort to positively avoid such risks

We expect some European energy markets to continue to demonstrate considerable imperfections and to be characterised by integrated, incumbent energy companies of significant size and market power. UK Government support for the rapid and effective implementation of the EC's new proposals for extending the electricity and gas directives, especially the effective unbundling of natural monopoly from competitive activities, accompanied by strong action to deal with anti-competitive restraints, will continue to be important in this respect.

Improved interconnection and access arrangements across the UK as a whole and with other European markets will also be increasingly important. It is vital that the UK Government seeks to ensure that access to all UK and European interconnectors is fair, open and non-discriminatory and that dominant market participants are prevented from maintaining or strengthening privileged positions. Non-discriminatory, commercial solutions to interconnector congestion, when combined with new build projects, will also improve security of supply.

We believe that, over the period covered by this review, the UK economy will be a net beneficiary from increased interconnection and that the UK should ensure it sets a framework that encourages the development of further interconnectors, where these are commercially justifiable.

Gas to gas competition in EU is especially critical to UK in the light of its future dependency on imported gas.

A liquid European market, unimpeded by national borders and free of cross border charges, will have a positive impact on optionality for the UK energy market. It will be particularly important for the UK Government to press the EC to ensure that the very real issues of supply security are not abused for the purposes of obstructing liberalisation. An example of unjustified restrictions would be for incumbents to deny others access to necessary resources and services, such as gas balancing, blending and storage. A further example would be the abuse of long term contracts that tie up available supplies of energy and act to effectively exclude new entry. Ultimately gas release programmes are likely to be required in some Member States in order to develop sufficient European gas to gas competition to reduce the risk of gas dependency to the UK market.

Whether increased dependence of the EU on energy imports is liable to decrease energy security or competitiveness will depend on the circumstances and the fuels involved. We do not see significant issues with increased import dependency on coal or uranium fuels due to the level and diversity of available resources, though there are technical advantages in maintaining indigenous coal production where this can be achieved economically. However, a significant increase in dependency on oil and gas imports could bring significant risk to the EU and UK, both of price risk and physical availability, due to the concentration of the sources (and in the case of gas, import routes) and the cartelisation of suppliers.

It is therefore particularly important to reduce the strong linkage in Europe between gas and oil prices through the indexation clauses in long-term gas contracts, which has recently impacted considerably on the UK market. We firmly believe that the best way to erode this adverse linkage to the volatility of international oil markets - and also to achieve stable quantities, prices and investments - is by promoting the effective operation of the free market. We expect this to lead to multiple contracts of differing durations with different indexation and prices that together will provide the desired stability.

In our opinion it is important that future UK and EU partnership discussions with a diversity of supplier countries are focussed on creating the right environment for financial investment with less political risk. This will facilitate the development of sufficiently open and liquid markets that will allow long term competitive - rather than monopoly - contracts to be an attractive option for market players. We at TXU are not afraid to take long-term contracts where we consider that the market enables the risk to be managed. Contracts of the `monopoly' type are an idea whose time is past; they could prolong the damaging linkage of gas prices with oil prices and are likely to distort competition, with consequent damage to European competitiveness.

3. The removal of European market imperfections

It is of considerable importance that firm action is taken to ensure that anti-competitive practices relating to the production or importation of energy are removed. For example, we welcome the announcement in June by the Norwegian government on the temporary halt to its system of joint gas sales through the Gas Negotiating Committee, or GFU, following

pressure from the Commission. We ask the UK Government to support this process and to ensure that the GFU is permanently abandoned.

We also welcome the steps the EC is taking to end so-called “destination” clauses in gas sales contracts. In our view such action will ultimately act to depoliticise energy markets and to ensure that consumer demand and the cost of competitive energy sources are responsible for providing signals to energy producers. Until such time as this is the case however we support the view that it is appropriate for the UK to protect itself against potential exposure to political threats to secure and reliable supplies of energy and to concentrate on stimulating sustainable indigenous sources of supply.

It is our view that tax and state aid policies, if applied in a manner that distorts competition, are liable to create obstacles to competitiveness in the European Union. It is therefore desirable for the UK to support continued EC policing of the existing State Aid rules and to ensure that taxation policies are not discriminatory.

With regard to fiscal taxation policies, we believe that these should be flexible enough to reflect Member States’ particular requirements and as such we do not support full harmonisation. However, we do believe that some simplification of energy taxation would be valuable, especially introducing a zero rate VAT on HV cross-border electricity trade; this would improve security of supply as the current process is currently leading to operational difficulties and complexity.

Similarly TXU believes that it is also important to maintain appropriate degree of subsidiarity in implementing EU legislation to avoid inappropriate intervention in UK energy policy. For example it is particularly important for the UK to maintain the flexibility to implement its own climate change programme that reflects the specifics of the UK market and would allow the UK to achieve its targets in the most efficient and cost-effective manner. It is likely that some EU environment-facing legislation may be less appropriate for the UK market, which would result in reduced security of supply or higher costs to the economy with considerable detriment to industrial competitiveness for little additional gain. Likewise it is also important to ensure that the current practice of subsidiarity in the transposition of EU energy directives into national legislation is maintained and that there is no dilution of the UK competitive market through EU legislation.