THE POWER PROCUREMENT BUSINESS - ITS FUNCTIONS AND FUTURE

PART 1

BACKGROUND

Introduction

NIE's Power Procurement Business was established at privatisation to carry out two functions. The larger function was to control the dispatch of power stations and to control the flow of electricity on to the wires. This is performed by the Transmission System Operator (TSO).

The second function was to act as the monopsonist purchaser of all electricity traded in Northern Ireland and the monopoly seller of all traded electricity. This function required the Power Procurement Business to be the counter-party to all the generator contracts agreed before NIE was itself floated as well as the Non Fossil Fuel Obligation contracts which DED (now DETI) since privatisation, has required NIE to sign.

The Power Procurement Business since privatisation

As one of NIE's three price controlled businesses, the Power Procurement Business has operated successfully since privatisation. It was the only price controlled NIE business to accept my price control proposals in 1996. Its turnover and profits since privatisation are given in the table below.

	Turnover £m	**Profit £m**
1992/93	248.6	2.6
1993/94	270.9	3.3
1994/95	282.2	6.0
1995/96	301.0	8.8
1996/97	314.8	7.1
1997/98	315.2	4.8
1998/99	312.6	4.8
1999/00	329.8	3.4

At privatisation the PPB had more capacity than Northern Ireland required. Since privatisation it has reshaped its contracts to better match the requirements of customers by reducing front-end capacity and changing the payment stream of the contracts at Power Station West and Coolkeeragh.

	MWs Contracted	**GWhs sent out**
1992/93	2243	6838
1993/94	2243	7058
1994/95	2243	7182
1995/96	2258	7370
1996/97	2138	7567
1997/98	2138	7683
1998/99	2078	7981
1999/00	2078	8172
2000/01	1784	5775*
2001/02	1550+	5571*
2002/03	1691++	5703*

*Maximum franchise market based on NIE's estimate of total demand.
+After transfer of GTs to TSO
++after transfer of GTs but includes 125 MWs of Moyle IC until 2007.
Source: NIE and Ofreg estimates

The Internal Market in Electricity (IME) Directive

The IME Directive required the liberalisation of the electricity market. Starting in 1999, 26% of customers had the right to choose their own supplier. This was to rise to 35% by 2003. Northern Ireland will however achieve 35% market opening by 1 April 2001, together with full liberalisation for renewables. With few large users this means customers with 680 Megawatt hours of annual demand will have access to the competitive market. The Directive, together with earlier rules liberalising trade in Combined Heat and Power plants (CHP) and renewables, broke the monopoly of the Power Procurement Manager.

The IME Directive also required the TSO part of the Power Procurement Business to become a separate entity and independent in management terms. With potentially many players in the energy market the TSO has to be both neutral and seen to be neutral in dealings with suppliers, generators and the T&D business.

The IME Directive initially obliged me to split the original Power Procurement Business's price control into two separate price controls for the TSO and that part of the Power Procurement Business which traded electricity and held the generator contracts. This electricity trading part of the original Power Procurement Business is referred to hereafter in this paper as the PPB.

From 2002 onwards new and separate price controls will be necessary for both the TSO and PPB. A consultation paper will be published later this year on the TSO. This paper is to discuss and consult on the role and location of the PPB as a prelude to a consultation paper on the form of price control which would be appropriate to it.

PPB revenues and incentives to date

While the original PPB held its monopoly/monopsony position it had a price control which provided it with a revenue stream based on an incentive to beat a fuel price index, a units related element and a return on its assets. Most of the assets will however be attributed to the TSO since the PPB is a very small organisation (7 people) with almost no physical assets.

For the period up to 2002 I have agreed to amend PPB's revenue formula to allow it to earn revenue from selling the output of its capacity to other than franchise customers. The opening of the market potentially deprives the PPB of up to 35% of its unit related revenue. For the period up to 2002 I have agreed with NIE to allow PPB to compensate for its foregone revenue by earning revenue from sales to non-franchise customers. Trade and sales can occur in six basic ways. These are:

- sales of top up supply at Bulk Supply Tariff (BST) to second tier suppliers (STS) who want to buy some of their power from the PPB;
- sales outside Northern Ireland;
- by trading with other generators so that PPB would allow its lower cost plant not required in a particular period to run in place of an independent plant with a higher marginal cost;
- sales of renewable electricity;
- negative sales. This will occur when the PPB buys from an STS or an IPP energy for franchise customers at below the PPB's marginal cost;
- an auction of any excess contracted capacity for independent use by STSs.

When the PPB buys from an IPP or STS for franchise customers at a lower price than the marginal cost of one of its contracted plants, the PPB will receive the unit related payment for that transaction.

It must be clearly understood however that PPB cannot sell to STSs or eligible customers in Northern Ireland on terms other than its published BST. If PPB sought to do so I would regard such behaviour as anti-competitive and take steps to remedy the situation.

PART II

ROLES FOR THE PPB

Supplying franchise customers

One role for the PPB is a continuation of its original function. It is to provide a supply of electricity to the 65% of customers who will remain committed to the long-term contracts after 2001. In practice, franchise customers are almost all supplied by NIE's Public Electricity Supply Business though in theory they can be supplied by any supplier. However, as all the suppliers to franchise customers must buy from the PPB's contracts, this distinction is rather academic at least for the purpose of this consultation paper.

The PPB's market will stabilise at 65% of total demand in Northern Ireland after 2001 when the 35% market opening will take place. The European Commission may require further market opening after 2006 or possibly even before. Ministers may decide at any point that they would like to have the market opened further. Some further market opening is probable though its timing is uncertain. The franchise market demand is likely to grow year on year by about 2% pa for the next few years.

In these circumstances the PPB faces some risk of "stranded contracts" i.e. contracts which cannot be fully financed by revenue collected from customers. This risk is not likely to materialise in the immediate future but cannot be ignored in the medium term i.e. four to five years away. The risk of exposure to full market opening is likely to be at least 8 years away.

PPB has two options for managing and reducing its small but theoretical exposure to stranded costs. The first is to reduce the amount of capacity which is contracted to it.

The PPB has contracts with Power Station West, Coolkeeragh, Kilroot and Ballylumford as well as with renewable producers.

In recent years the PPB's contracted capacity with Power Station West has been reduced by 180 MWs, with Coolkeeragh by 60MWs and with Ballylumford by 234 MWs. Also the 234 MWs of Gas Turbines (GTS) are now in effect transferred to the TSO and financed by a System Support Levy paid by all customers. Moreover, the last sets at Power Station West and Coolkeeragh will all be out of contract by 2004.

Therefore compared to 2243 MWs contracted to PPB at privatisation to send out 6838 GWhs PPB currently has 1784 MWs (including about 17 MWs of renewables added since privatisation) to service a franchise market of 5571 GWhs in 2001/02. By 2004 this total will have fallen to 1485 MWs of which 117 MWs could be released in 2004. For 70 months from 2001 PPB will also have 125 MWs of the Scottish Interconnector's capacity contracted to it.

Secondly, the PPB can seek to improve its contracts so that in the event of the market opening further or fully, it contracts would be able to perform satisfactorily in a competitive market. Proposals from the generators potentially have the effect of reducing the marginal cost of Ballylumford and Kilroot and putting both plants in a better position to compete. The partial buydown of the Kilroot and Ballylumford contracts will help in this regard though more critical are improved fuel and financing efficiency. These proposals have been evaluated by my consultants which indicate that both plants are capable of offering competitively priced electricity under certain scenarios though Ballylumford will remain handicapped by the long term gas contract to which it is at present committed.

One other option for PPB would be to sell its NFFO contracts. The sale could take the form of outright sale of the capacity or sale of the output. The "loss" on the sale would have to continue as a PSO though at a lower rate than at present. So long as the renewable generators remain in place the ownership of the contracts is not of importance.

A New Role: Making the Market Work

Potentially, however, a new role for the PPB is emerging. The PPB is an entity whose licence requires it to operate in the public interest. Beyond an incentive payment any "profits" on trading feedback into lower prices for customers. It has no commercial incentive to "game" the trading mechanism.

The PPB cannot sell to STSs at other than its Bulk Supply Tariff (BST) since it has a degree of dominance in the NI market which would make its doing so anti-competitive. If there were a de facto Ireland wide electricity market the possibility that PPB would be in a dominant position may disappear as its share of the island's capacity would be unlikely to exceed 15%. However PPB can, without exploiting a dominant market position, both improve the efficiency of the market and make additional revenue for franchise customers by doing the following:

- improving its contracts and reducing the BST to the lowest achievable level; this puts a ceiling on the upper level to which prices in the competitive market can drift;

- publishing at the beginning of the year the amount of capacity it would have available and the hours of its availability and its price; it this would allow IPPs to bid for its output when the effect is to reduce the IPPs' average costs;

- publishing day ahead availability and price offers; this would ensure that low cost units are run ahead of higher cost IPPs and the economic and environmental benefits of greater generation efficiency are shared;

- selling at the best obtainable price outside Northern Ireland any units not required; this would enhance the PPB's revenues and this extra revenue would feed into a lower and more competitive BST the following year.

A power trader role along these lines adopted by the PPB would considerably improve and sharpen competition, optimise the use of generation resources and minimise costs for both eligible and franchise customers. Such a role would be helpful to competition as an all-Ireland market in electricity develops. It would be essential in a Northern Ireland market.

In carrying out such a role PPB would, as it is at present, be acting in accordance with tightly drawn licence conditions which have the effect of making it operate in the public interest. At the same time it would also be making profits for its shareholders as a private sector entity. Accordingly there is a strong case for incentivising PPB to maximise sales of electricity to non-franchise customers and to include in its allowed revenue costs incurred in developing and enhancing its role as a power trader.

New Contracts

It is possible that the capacity which is under long term contract to PPB, namely Kilroot and Ballylumford contracts, may not be sufficient to enable the PPB to meet its commitments. This situation could in particular arise if the BST price falls relative to the market price of electricity with the result that eligible customers chose BST. In these circumstances it may be in the general interest to allow the PPB to tender for new long-term contracts as this would be the most effective way of keeping generation costs competitive in a small, peripheral market with weak competitive pressures.

Developing the Competitive Market

The competitive market may not of its own accord bring forward efficient plant at a low cost as the market may be perceived by investors as risky. If this appears to be the case it would be possible for the PPB to sell on some of its contracts to a supplier and tender for new plant to service franchise customers. In this way the PPB could ensure both that new efficient generation arrived in Northern Ireland and that the competitive market worked to drive down costs to the level that they would reach in an efficient competitive market not distorted by the small scale nature and investment lumpiness of the Northern Ireland market.

Locating the PPB

The PPB and the TSO have since privatisation been located in the same NIE business. With the IME Directive's requirement that the TSO should be clearly seen as an independent entity, the question of the location of the PPB must be addressed. The PPB as the counter-party to the contracts had to be credible in its ability to recover from customers sufficient revenue to pay for, otherwise honour, the contracts.

There are three possible locations now for the PPB. The first is to remain as it is with the TSO in an independent TSO business. This option has the benefit of recognising that the function of the PPB like the TSO is primarily a public interest function acting as a mechanism to ensure that competition works and that Northern Ireland customers have access to least cost capacity on long term contracts. It would also provide the contract holders with assurances that the contracts would be honoured since the TSO is in a position to recover revenues for customers. The principal disadvantage of co-locating the TSO and PPB would be the need to ensure in a transparent way that the TSO did not give a preference to the PPB contracts when dispatching or that the PPB did not have access to information which improved its bidding performance in some future trading arrangement.

The second option is to locate PPB in NIE's public electricity supply (PES) business. The PES supplies the franchise market and the PPB's contracts provide that supply. However, if the PPB were located as the PES's purchaser this could create a difficulty with other suppliers who are entitled to buy from PPB and sell to franchise customers. Secondly, it would not be the logical location of the PPB if the PPB were to develop a new role as a power trader, driving and sharpening the competitive market.

The third option would be to have the PPB as a totally separate business entity. If this is the solution, the independent entity requires to be credible as the counter-party to the long term contracts. The PPB at present within NIE is credible but that is because it is part of a financially powerful organisation. If PPB moved away from NIE then it would require to have powers to raise levies to pay for the contracts if it could not recover the revenue in the market place or be backed by a parent company as powerful as NIE.

Conflicts of Interest

The location of the PPB raises conflict of interest problems, some of which have been alluded to above. The main conflict of interest problem is between the public interest role of PPB and the commercial interest of any owner if that owner is an energy company in any part of Ireland.

There are two major conflicts of interest between the PPB and Viridian - one is actual and the other is potential.

The actual conflict of interest is on the renegotiation of the long term generator contracts. Changes to the long term contracts potentially affect the risk to which Viridian is exposed under those contracts. It is unreasonable to place a private company in the position where it may perceive itself as having to accept additional risk in order to improve benefit to customers. The long term generator contracts are essentially between the generators and customers and those two parties should be able to make mutually beneficial changes without reference to NIE. Unfortunately the present arrangements trap NIE in the middle. For this reason the continued location of PPB within Viridian is in the interest of neither Viridian nor customers.

The second conflict of interest will become acute once Viridian's power station at Huntstown in the Irish Republic has been commissioned. PPB may to some extent be in competition with it. If the PPB is successful in selling the output of its contracts which is not required for the franchise market this must put downward pressure on the market and reduce the scope for profit for Viridian Power Resources. This becomes even more the case should Viridian become a generator in Northern Ireland. This would not simply be a case of Viridian having two generation businesses both of which would earn profits for shareholders. The PPB would certainly earn income for shareholders under its incentive mechanism but profits earned by trading would be - as they are at present - fed back to customers in the form of lower prices in the following year.

These considerations point to the desirability of PPB ceasing to be a part of NIE. However, if PPB is to be a credible counter-party to long term contracts then either legislation is required or a new owner who would be financially credible. In the absence of the immediate possibility of legislation the least bad solution pro tem may be to retain the PPB with the TSO and surround both with strict licence conditions which separate their activities. This, however, should not necessarily be regarded as a long-term solution.

System Security

Since privatisation the Power Procurement Business has had responsibility for system security and has had to ensure that there was sufficient capacity available to maintain the level of security of supply required by NIE's licence. At present the PPB is under an economic purchasing obligation (EPO) which would preclude the purchasing of electricity not required to supply the needs of the franchise market - though existing contracts have to be honoured. It was mentioned above that de facto the Gas Turbines (GTs) which are used as the system's last line of defence and to provide a black start capability are now the responsibility of the TSO and their costs are met by a System Services Security (SSS) levy paid by all users of electricity in Northern Ireland. The market provides for the eligible customers in the competitive sector and there are at present 354 MWs of uncontracted capacity though only 294 MWs are trading. In 2001/2 interconnectors will enable generators in Scotland and the Irish Republic to more readily access the Northern Ireland market.

There remains the question of who will be responsible for deciding if there is enough plant physically available to maintain security of supply and make up any deficit. This was a task for the original Power Procurement Business. With the split of this Business into a PPB and a TSO it is the TSO who is responsible overall for managing the efficient operation of the system. This is the position currently reflected in the TSO's licence. Accordingly, in addition to paying for the GTs it is the responsibility of the TSO to review the amount of plant physically available in NI in relation to possible system needs and, after taking due account of the interconnectors, contracted capacity and arrangements with new generators coming on to the system, to secure - at least cost - such additional plant as is required for system support. As the objective would be to have sufficient plant available any payments offered for system support should be reduced and ultimately eliminated in so far as the plant concerned earned revenue from trading.

The relevance of this to the PPB is twofold. Firstly, it clarifies the role of the PPB. It is limited to enabling the franchise market to be supplied - including such margin as may be required to cover outages and a security margin - and secondly to sharpening competition. It is not required to provide cover for the entire market. Accordingly, if the PPB wanted to secure additional capacity it would, subject to satisfying its economic purchasing obligation, be free to enter into commercial contracts including contracts with the additional plant with which any TSO has entered into agreement for the provision of system support.

Conclusion

The PPB has since privatisation played an important role in seeking to mitigate the damage done to customers by the overpriced generator contracts. Its role has however been hampered by the ambiguity of its position seeking both to serve the interests of customers and the commercial interests of NIE.

The IME Directive and the changing market provide new challenges and opportunities for the PPB. One option would be to allow it to wither away. That would be to miss the opportunity of developing the PPB as an instrument for driving - in the public interest - competitive pressure and technological efficiency into the market place. Since the PPB will be needed in some shape or form while the generator contracts last it would be wise to explore this option fully. The difficulties which have been experienced in the much larger market in England and Wales in creating a genuinely competitive market show that Northern Ireland would be foolish to discard any instrument which encourages genuine competition.

There are, however, questions which need to be addressed as to the longer term status and structure of the PPB and its relationship with the TSO and other industry players.

For the period up to 2002 under an agreement between Ofreg and NIE it will operate under a separate price control within NIE. Its allowed revenues will be derived from the 1997 price control and the loss of unit related revenue from market opening will be made up by a bigger incentive for sales to non-franchise customers. If it sells more than 350GWhs to offset the estimated loss of 1650 GWhs it will increase its profitability.

This interim arrangement is unlikely to change PPB's risk/reward profile. Over the longer term there may be a case for reducing the share of its income which comes from the franchise market and increasing its opportunity to earn larger profits outside the franchise market. "Sticks" and "Carrots" may be appropriate here, rewarding successful entrepreneurial behaviour but penalising missed opportunities to make gains for customers. It is already apparent that the margin in some of the trading opportunities is so fine as to not sit easily with a simple per unit incentive. An alternative might be a percentage of the "profit" from the transaction capped by a maximum amount per unit transacted.

Whatever the longer term status, a price control for the PPB from 2002 will be required and the consultation on this will begin later this year. If necessary - for example if legislation felt to be essential is delayed - the existing price control could be rolled forward.

However, before I begin the formal price control consultation, decisions are required on the longer term role and structure of the PPB. In particular, the following questions arise:

(a) Should the PPB become part of the independent TSO?
If so, what safeguards would be required?

(a) Should the PPB remain within the Viridian Group after 2002?
If so where in the Group should it be located and what licence

conditions are required to resolve the conflict of interest between its public interest duties and Viridian's commercial interests?

(a) Should PPB be explicitly charged with operating in a way which sharpens and stimulates the competitive market in Northern Ireland to ensure it produces a competitive market outcome?

(a) Should PPB be able to enter into additional contracts if franchise market demand exceeds supply?

(a) Should PPB be able to sell its contracts and replace them as a way of ensuring the orderly provision of new entrant low cost efficient plant in Northern Ireland?

(a) Would another private sector owner for PPB be acceptable and if so, should that owner be required to have no electricity or other energy interests in either Northern Ireland, Scotland or the Irish Republic?

(a) Should the financial underpinning which PPB requires as counter-party to the contracts be provided by legislation?

(a) What incentive structure is appropriate for PPB to enable it to most effectively carry out both its tasks?

Responses should be sent to Alan Smith at Ofreg by 31 August 2000.

Response will only be treated as confidential on the specific request of the respondee.