06 July 2004

BSC Modification Proposal P162 – Changes to the Definition of Exports and Imports

British Energy Response to Elexon Consultation

The modification proposes to remove a longstanding and fundamental, and in our view, desirable, principle that underlying generation and demand should be separately metered. This principle is currently waived in the code for the case of licence exemptable generation that does not give rise to a net export for a party at a boundary point. But licensed generation and exemptable generation which gives rise to an export for a party at a boundary point is required to be distinguished from demand at the site.

Whilst we agree that current clause K1.1.4(d) referring to generator and unit transformers introduces an unintended effect of requiring all generating units to be individually metered, the modification goes far beyond correcting that, by removing clause K1.1.4(c) and with it any requirement to distinguish generation and demand at a site with licence exempt embedded generation. We consider such a change as short-sighted. Installing metering at a later date to sites being built now will almost certainly be far more expensive than installing now. Short term savings in metering costs for some parties now would leave long term difficulties in identifying underlying supply and demand. As the level of distributed generation increases, this could present network operation difficulties, would present obstacles to potential future changes to the charging regimes for obtaining services from an integrated electrical system, and entrench local vertical integration. We do not believe this would better meet BSC objectives relating to competition (c) or efficiency (d) in the long term, and in the long term could reduce the ability of network operators to manage the system effectively (BSC objectives (a) and (b)).

If the government wishes to assist favoured new projects, or sites in Scotland which do not currently have code compliant metering, this should be given in the form of explicit, transparent, individual dispensations, or direct aid via renewable subsidies.
We acknowledge a defect in the current code concerning clause K1.1.4(d), which we believe was intended to apply to licensed generating units rather than all generating units, and should have permitted combined generator and unit transformer metering rather than requiring it. This is partly addressed by the proposed legal text.

The proposal also claims that a defect exists because some parties would incur costs in installing metering to satisfy current code requirements, but the metering is not actually required for current BSC settlement purposes. We do not accept that this is a defect, given the wider use to which metering data gathered under the BSC is put.

Further the proposal suggests that some parties may already not have adhered to code metering requirements. This is not a code defect.

This proposal has considerable impact beyond the scope of the BSC.

Further Comments

British Energy have fundamental objections to this modification, which, in removing BSC K1.1.4(c), we think goes far beyond any immediate desire to make relatively trivial cost reductions for licence exempt windfarms or other small scale generation schemes.

We believe minimal changes are required to clarify the current intent of the BSC that:

- Licensed generating units should be separately metered (optionally with their associated unit transformer, if any).
- Generation and demand sharing a boundary point should be separately metered even when belonging to the same party **except** where the generation is licence exempt and does not give rise to an export from the site.

The proposed modification could save small amounts of money now but will create barriers or increased costs to future developments in the electricity industry, particularly as the level of distributed and licence exempt generation increases according to government plans. These issues require wider discussion, beyond the scope of the BSC. Our concerns include:

- Loss of transparency of national generation capability and underlying demand. This includes potential loss of transparency of the fuels providing the energy.

- Entrenchment of the 'embedded benefits' to a subset of generation and demand. These 'embedded benefits' represent a subsidy from users paying transmission, balancing and other costs to the embedded parties. In the long term, and as distributed generation grows, it should be more efficient economically to provide the subsidy directly rather than through blanket 'benefits' regardless of true system service usage, as at present.

- 'Vertical integration' at a site level presents a barrier to future competition. Sites constructed with single net metering at the boundary point would require considerably more expenditure to install component metering at a future date. The main cost for non-domestic voltages is the Current and Voltage Transformers and associated circuitry and protection, which are relatively much cheaper to install as part of the design on construction. Division of large sites or separation of generation and demand at a future date to facilitate competition become more difficult.

- Operationally, as the volume of embedded and exempt generation increases, and the number of sites exporting to the total system increases, the balancing and stability of the total system is likely to become more complicated. NGT currently require more technical information about current generation than is required for idealised electricity trading, in order to maintain the stability and facilitate balancing of the transmission system. With increased distributed generation, both the transmission company and the distribution companies are likely to require more information about the underlying physical assets and their current state in order to maintain electrical stability and balance. Discrete metering below the boundary point can facilitate this.

- While physical metering solutions are avoided for 'distributed' generation, potential technical developments in metering will be stifled. Electronic and communication technology has moved a long way since the electricity industry was privatised. Except electricity metering? Cost reductions come with volume. True demand side participation in balancing will not occur until the demand of individual customers is measured half-hourly (or at finer resolution, as had been anticipated in 1990 when the Pool was created).

- Parties with generation and demand metered net at a boundary point will have flexibility to vary opaquely the sources of energy and potential balancing services provided to network operators, by 'self-despatch within balancing timescales', in a manner not available to larger power stations or demand sites and licensed generators. These latter are required to provide energy and balancing on an individual generating unit/BM Unit basis and are effectively exposed to imbalance for failure to provide energy or service from a particular BM Unit, even though the connection to the total system is effectively at one location. The modification as drafted would thus further increase the 'privileges' given to small generators.

In summary, many benefits are provided to small scale generation to meet wider objectives, but this modification goes a step too far by providing obstacles to potential future developments for more efficient operation of the market, by removing capability to distinguish supply and demand for electricity.

We make the following general observations about this modification proposal:

- The intent of the proposal appears to be to reduce the burden on prospective parties connected in Scotland to provide code compliant metering on components of equipment 'behind' a boundary point to the Total System. This may create a discrimination between parties in England and Wales with configurations compliant with the Code as it stands.

- The Code currently places fairly demanding requirements for the measurement of export on individual items of generating equipment. There are many reasons why this may be considered desirable. We are concerned that reduction in the requirements for metering would represents a retrograde step in the development of the industry. We would prefer to see individual dispensations, as is the case currently.

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