

## Key Points and Actions

### Key Points and Actions Arising from Meeting No.13 Held on 6<sup>th</sup> June 2003 Euston Plaza Hotel, London, WC1H 0HT

#### Present:

Malcolm Taylor	MT	Chairman
Rupert Judson	RJ	London Electricity
Keith Miller	KM	
Hugh Conway	HC	Energy Watch
David Lane	DL	ClearEnergy
John Capener	JC	British Energy
David Tolley	DT	Innogy
John Stewart	JS	Campbell Carr
Russell Cooper	RC	National Grid Transco
Tim Russell	TR	
Nick Frydas	NF	EDF Trading
Steve Drummond	SD	EDF Trading
Richard Dunn	RD	Secretary

#### In Attendance:

Richard Ford	RF	Ofgem
Simon Thornton	ST	National Grid Transco
Bob Brown	BB	Cornwall Consulting
Rekha Patel	RP	Conoco/Phillips
Ian Topliss	IT	Edison Mission Energy
Danielle Lane	DL	British Gas Trading

## 1 Introductions/Apologies for Absence

Apologies were received from Charles Davies, Nigel Cornwall, Dick Cecil, Barbara Vest, Paul Jones, Simon Lord and Jan Devito.

## 2 Notes of Key Points/Actions of the Meeting held on 19<sup>th</sup> May 2003

The draft Notes of the meeting held on 19<sup>th</sup> May 2003 were AGREED subject to the inclusion of a number of comments from Paul Jones.

## 3 Other Issues

### a Interconnectors

SD gave a presentation reprising issues associated with an access regime and Interconnectors (see website).

#### Key points

- (i) E & W Transmission Access rights obtained through the Interconnectors

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by the Interconnector Owners (IOs) and then onward to Interconnector Users (IUs). IUs obtain access by entering into Interconnector Agreements (IAs) with IOs of negotiable duration. Rights for IOs are enduring and for the period of the IA for IUs. IOs can have two-way rights, IOs one-way or two-way rights. The volume of trade determines the level of BSUoS charges. IUs contract for I/C and transmission access simultaneously.

- (ii) In general, IOs are treated and charged the same as any other connectee through CUSC – connection and TNUoS charges are passed through to IUs via the IA and BSUoS charges are made to IUs via CUSC on a “gross” basis.
- (iii) Key questions regarding impact of a Transmission Access regime –
  - Is there a need for different rules for interconnections from rest of system or between existing and future interconnectors and/or for imports and exports?
  - Do the new arrangements hinder or ease cross border trade?
  - Will Transits be considered separately from 2-System trades?
  - How will Superposition be catered for?
  - Do the arrangements impact on new interconnection investments? Are there changes to the risks and benefits?
  - Should current and/or future Interconnection assets be considered as part of Transmission Infrastructure, with capacity auctions and inter-system trades done at mid-point?
  - When and how will the buy back of rights (I/C and T) be undertaken to relieve a transmission constraint? For one or the other? Will it be after trades have been agreed? Will this be in the energy market or the Balancing Services market?
  - System to System trading? How? When? Who? Rights? Charges?
- (iv) European Developments - Cross Border Trade (CBT) debate may lead to fixed or zero charge for use of transmission for CBT thus replacing connection and TNUoS charge and/or any TA charging regime (especially so for transits). Harmonisation of the G charge also live issue. Once capacity determined use of interconnectors should be considered firm except when potential for loss of demand results
- (v) What IOs/IUs want from a TA regime includes realisation of investment

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opportunities, equitable treatment with the rest of Europe (Interconnectors as a class should be treated the same), entry and exit rights to each system agreed to IO for the full life of the interconnection, the auctioning or contracting of Interconnection Capability to IUs automatically giving rights of access to the transmission system (not a two tier system as in gas), trading opportunities for IUs maximised in all timescales, full recognition of two-way flow and superposition, firm or non-firm rights and the only pass through costs should be BSUoS and CBT related to trading volume.

### (vi) Conclusions

- Interconnections may need careful consideration and perhaps special treatment due to the interaction with two markets – undertake as part of TA regime testing
- TA regime should allow maximum freedom to trade subject to system security and safety considerations
- Preferential or prejudicial treatment should be minimised – tail needs to fit the dog not wag it
- CBT and its governance are a European issue not just UK
- How should Interconnectors be viewed within transmission planning and investment? Zero transfer capability?

### Points in Discussion

- (i) Interconnectors between the two Scottish systems have always been seen as infrastructure so no additional cost for taking power over the boundary – with the single European market beckoning this may be best approach.
- (ii) Interconnectors may be the hardest test of any TA regime model but needs to cope with them
- (iii) Reasonable comparison between Interconnectors and Distribution Networks – both have generation and distribution connected to them and both are linked to transmission systems (but D systems more complex)
- (iv) Much of the framework in which the Industry has to operate must be taken as read (e.g. EC Directives, UK licence provisions). However, TA arrangements should be devised which stimulate trade within the background framework. Further work to be undertaken to see if questions raised in presentation can be answered and see if Interconnectors can be fitted into a TA regime in a similar way to generation and demand. Experience of the pumped storage business that is also dependant on coincident generation and demand could also be valuable.

### Actions

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- (i) How should a TA regime embrace Interconnectors? - **Action SD (for 23 June)**
- (ii) How the proposed Transmission Access market would affect Pumped Storage ? - **Action IT (for 23 June)**

### **b BETTA**

MH gave a presentation considering the issues that BETTA raised for a transmission access regime (see website).

#### **Key points**

- (i) Scotland brings 7 power stations at 275/400kV to BETTA, many power stations at 132kV and below, a large volume of intermittent generation and some wind which will connect at 132kV and 275kV.
- (ii) On transmission Scotland brings 2 public networks with different planning and operating standards (although the role of transmission owner is not clear). There are also two Distribution Networks, one containing an islanded system
- (iii) There is also the 500MW Moyle interconnector with Northern Ireland connected at 275kV and a large quantity of dynamically controlled demand (many hundreds of MWs)
- (iv) Implications of a TA regime include Generators seeking “portfolio TEC” in order to mix firm and intermittent sources, charging for peak capacity may not be appropriate and different planning and operating standards suggests different charging and compensation arrangements
- (v) Scottish Power Energy Management do not believe that major changes to the access regime in E & W should be made ahead of BETTA

#### **Points in Discussion**

- (i) E & W must think through implications of inheriting two system operators in Scotland – TO in the firing line on this. Also two distribution networks including one islanded system. SO/TO Code provisions will be important
- (ii) Could be that what is provided by a TEC will be different in Scotland given the strongly intermittent nature of generation and the different planning and operating standards

### **C European Developments**

DT gave a presentation examining European Developments and the potential impact on a transmission access regime (see website).

#### **Key points**

- (i) EC starts from viewpoint that desirable to harmonise regional markets in Europe - Italian zonal market (2004), Iberian Market (2005), SE Europe market (2006), Core market + accession (2006/7), Baltic market (2007)

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and UK/IRL market (2009)

- (ii) Objectives of the EC's medium term vision included -
  - full market opening
  - separation of network businesses from other activities
  - effective regulation of tariff methodologies
  - inter TSO compensation
  - siting signals at national and European level
  - transparent and liquid wholesale markets
  - Interconnector capacity allocated by implicit auctions - EU see Interconnectors as discrete entities which join two market places
  - Network operators to meet standards of transparency
  - System Operators to provide audited accounts
  - Agreed approach to security rules for the network
  
- (iii) The timetable for market liberalisation was -
  - 4/6/03 - Parliament approves Directive and Regulation
  - Redraft of Strategy paper due around 20/6/03
  - 3 papers to be produced on guidelines for Congestion Management, Inter TSO Compensation and Harmonisation of locational signals
  - "Florence" group meets in Rome on 8-9/7/03
  - Comitology process begins thereafter
  - 1/7/04 - Regulation becomes law
  - Guidelines apply from 1/7/04 but may be delayed until 1/1/05
  
- (iv) Three major issues (or two?)
  - Congestion Management and Inter TSO compensations
    - Congestion Management guidelines already exist
    - Commission want - counter trading for local congestion, market splitting for sustained constraints (as in the Nordic market), FTRs for interconnectors between markets (e.g. PJM). Implies Power Exchange in each market
    - Looking to get rid of inter TSO compensation in return for locational signals from Congestion Management
  
- (v) Harmonisation of Transmission charges
  - National G & L charges to reflect long run cost of network investment
  - Need for within market signals so as not to dilute locational signals
  - Pan European solution preferred but will take time to evolve - ETSO to deliver
  - Improved interconnection target of 10% likely to be ignored - but

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some schemes are progressing

### Points in Discussion

- (i) Agreements have been signed with Norway and Switzerland to underpin access arrangements with these non-EU interconnected systems
- (ii) EU model would solve problem of Superposition in UK access arrangements (IO takes the risk of running out of capacity)
- (iii) TSO Compensation scheme will probably cease on 1/1/04 but will be recovered separately (national Tariff - 1€/MW?).
- (iv) Scheme for harmonisation will probably be opposed in Germany as Generators there currently pay no connection charges as part of the TNUoS charge
- (v) EU keen on locational pricing - not keen on the ICRP based incremental approach in E & W
- (vi) Congestion Management will involve coordination to allocate capacity but that will not be easy (auctions based on spot prices?)
- (vii) Absence of transaction charging for transit in proposals indicates EU leaning towards solution where Interconnectors treated as part of transmission systems
- (viii) Details of a forthcoming workshop on European electricity issues organised by Cambridge University and MIT and sponsored by RWE to be held in Cambridge on European issues [to be] attached

### Action

- (i) Details of Cambridge conference to be attached to meeting notes - **Action DT to provide to RD (see Annex)**

## 4 Competing Access

### a Generator's Current Rights

#### i NGC Perspective

ST gave the meeting a presentation describing NGC' s view of current access rights for Generators (see website).

### Key points

- (i) TEC applies to Generators who have direct physical interface with transmission system via which they inject/offtake electricity at specific locations or through injecting onto the total system have distinguishable effect on the operation or investment in the transmission system. This is an explicit participation only – rights of a specific quantity are acquired ahead of real time use
- (ii) Granularity is provided by CEC which is a station and unit basis. TEC was on station only basis and could not exceed CEC. Locationally the resolution is sub nodal for CEC and nodal for the use of the wider system

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- (iii) Temporally the right is the maximum value that can be inputted to the system in any half hour on an annual basis with an evergreen option provided contractual undertakings are met and payment made
- (iv) Firm rights for the Generator to export onto the system are gained by the Generator having a physical connection to the transmission system and a TEC. The upper level of those rights are defined and their price is fixed annually. Compensation is payable for any system constraint
- (v) Non-firm rights for the Generator to export onto the system occur when the transmission company is able to withdraw access rights (partially or completely) at no penalty due to transmission faults or planned maintenance. There are currently no explicit penalties for breach by the Generator – letter of admonishment only tool
- (vi) Charging in positive zones was on the basis of maximum annual TEC and in negative zones payment was on the basis of the average maximum output in a Settlement period for each of the months November to February inclusive. Output is capped at TEC
- (vii) The modification process required a generator to apply to the transmission company to increase his TEC. He would also need to notify a reduced TEC

### Points in Discussion

- (i) Agreed that it would be useful exercise for NGT to provide an analogous description of current rights for the demand side. ST agreed to this action on behalf of CD for the next TASG meeting.

### Action

- (i) analogous description of the current access rights of the demand side to be provided by NGT - **Action ST & CD (for 23 June)**.

### **b CAP043 Implementation Issues**

ST gave the meeting a presentation describing the issues that had arisen following the implementation of CAP043 (see website).

### Key points

- (i) CEC determines maximum technical basis of the connection site and is defined on a station and unit basis. TEC determines maximum injection into the system and is on station basis. TEC cannot exceed CEC
- (ii) Initial values all agreed and no modifications received. If values were varied NGT would require 3 months notice to produce a revised connection offer for an increase to CEC. A decrease in TEC would require 5 days notification and NGT would endeavour to provide a revised connection offer for an increase in TEC within 28 days but would have up to 3 months
- (iii) Station basis for CEC and TEC had caused some charging issues in

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implementation and had negative zone implications

### Points in Discussion

- (i) No breaches of CEC or TEC to date. Inflexibility issues relating to negative charging zones would be raised at TCMF on 10<sup>th</sup> June.

### **c Elaboration of options 1 & 2 – Process**

ST gave the meeting a presentation elaborating on the implications of options 1 & 2 for dealing with competing requests for access (initially considered at the meeting on 9<sup>th</sup> May) (see website).

### Key Points

- (i) Option 1 involves publishing the access capacity application by Genco 1. Genco 1 would still have the advantage of being first in the queue and may feel he needs to apply to understand the level of activity in an area. Genco 2 will have the advantage of knowing Genco 1's intentions in the area and can therefore proceed with full knowledge. Genco 2 can also make an early decision not to compete if he wishes
- (iv) Benefits include transparency for all parties and all applications made with full knowledge. Should lead to more efficient use of resources and could encourage trading offers although this was dependent on the User's requirements. Disbenefits include it may encourage spoiling applications (subject to fee payment) and might push a Genco to apply late against required construction lead times
- (v) Several issues associated with detail of option 1 – confidentiality of information so what should be published (size of plant, location – node/zone etc.)? 1MW of load at node 1 would not be equal to 1MW of load at node 2 and the problem of spoiling applications
- (vi) Option 2 involved facilitated trading by NGT. When Genco 1 applied for access capacity, with Genco 1's permission NGT would identify any trading opportunity and approach Genco 2. The two Gencos would however agree the terms of any trade prior to the issue of a connection offer by NGT
- (vii) Issues associated with Option 2 - it could be developed in concert with Option 1, NGT needed to be involved to determine the appropriateness of any trades, any offer would be conditional upon the Parties agreeing terms and whether NGT would need to see the contract between the Parties or simply rely on the breach mechanisms in the conditional offer (was there a need to strengthen breach conditions under this option)?
- (viii) Further issues with Option 2 included if an incumbent remained off the system for a limited period, his options to re-connect and whether his contract terms should determine his obligations. There were issues surrounding the brokering of trades and how to make that transparent as well as the problem of involving any further interested parties
- (ix) Possible add-ons to Option 2 included whether the connecting party

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could purchase sub-annual rights, TEC would need to drive injection rights and NGT would probably need to know who held the rights at any one time, payment of TNUoS would need to be ensured and there could be revenue implications such as a trading fee

### Points in Discussion

- (i) Option 3 could involve a Strategic Networks Authority brokering deals between parties or alternatively an "Auction House" approach. The latter would provide incumbents and new players with commercial values for the access rights. This would meet the requirement that rights should be tradable
- (ii) "Use it or lose it" may be the wrong way to look at access rights - perhaps should be approached from the opposite direction of "Compensation if no use"

## 5 Breach

### A Commercial Incentives for Generators not to breach

#### Points in Discussion

- (i) breach can be defined as an event where a Generator exports a higher number of MWs on to the system in excess of the access rights he has purchased for his TEC
- (ii) need to develop options for avoiding breach - desirable to encourage TEC holders to remain within TEC whenever possible
- (iii) However, there could be occasions when breach involves no adverse impact on the system. In order that remedies for breach are robust they will need to capture the range of eventualities, cost implications and potential system impacts
- (iv) One approach could be to develop firm and non-firm remedies - firm would apply if there were system and/or cost implications of a breach, non-firm would apply in the event of no system/cost implications arising from a breach.
- (v) It was agreed that further consideration of a breach regime on the generation side was required at the next TASG meeting as well as first consideration of the breach concept on the demand side

#### Action

Schedule Breach issues on the agenda for the next meeting - **Action MT (for 23 June).**

## 6 AOB

None.

## 7 Draft Agenda for Meeting on 23 June

Agreed subject to the addition of items on Breach (item 5 above).

### Annex

#### **Workshop on Electricity Transmission Issues: 18/19 July 2003 at the Judge Institute, Cambridge, England (sponsored by NGC and RWE)**

On Friday 18<sup>th</sup> & Saturday 19<sup>th</sup> July 2003, the CMI Electricity Project (DAE University of Cambridge UK and MIT Cambridge Mass. USA) in co-operation with associates will hold an in-depth workshop on current electricity transmission issues relevant for improving the integration of EU and US electricity markets. The aim of the workshop is to establish what is known, what needs to be known, and how to address the outstanding unresolved questions, drawing on the considerable expertise of the invited participants. The issues to be considered will include the adequacy of proposed locational prices, international congestion management, as well as regulatory design to encourage efficient transmission investment and the regulatory framework for efficient transmission operation. Such questions are high on the agenda of policy makers in the EU and the US, and they will receive detailed attention at the workshop.

The idea is to discuss these issues and exchange ideas and experience in a small (max. 25), and carefully selected invited-only group of experts to come to a better understanding of these problems. The discussions will be academic, in the sense of research and knowledge-oriented, and the aim is to reach agreed results where possible rather than staking out positions.