Transmission Access – SSE "Straw man" building on BWEA model

1. Introduction

1.1. At the Access Development working group meeting on 8th March, National Grid outlined the current arrangements for providing transmission connection and the security arrangements. While these arrangements have proved to be more than adequate in a market where there have been relatively few applications for relatively large power station, a number of problems have emerged in the context of a large number of applications from relatively small renewable generators.

1.2. Against this background BWEA presented a straw man model based on their earlier submissions to access consultations. The model presented had a number of strengths in resolving issues related to the GB "queue" and requiring some commitment from new users, but in our view had a number of misconceptions about the current processes and potential weaknesses in its potential application.

1.3. This SSE "straw man" firstly corrects the key misconceptions, then builds on the BWEA model for further discussion.

2. Comments on BWEA Proposal

2.1. In essence, the BWEA proposal sets a timescale for the transmission licensees to connect a new user without the current conditions delaying connection until network upgrades are complete and commits the user to a fixed date form which network charges are payable for a minimum period of time.

2.2. This has a number of potential benefits. Firstly only those generators that have planning consent would be likely to commit to making these payments. This would ensure a more efficient allocation of capacity in the "GB queue" in that consented projects that are at the back of the queue because of the timing of their application would be able to bring their projects forward. Also, it would remove the current uncertainty (from the generator's perspective) about the timing of the transmission licensees' network upgrades.

2.3. The proposal also states that efficiency in investment of the transmission system could be demonstrated in terms of avoided constraint costs. A key concern here is that demonstrating an investment would be efficient after incurring constraint costs implies a number of years inefficient and excessive constraint costs before the necessary upgrade can be completed. Transmission licence holders have obligations to develop an efficient and economical transmission system and such an outcome would not be consistent with these obligations.

2.4. In designing the network to cater for new connections, the transmission licensees already base the requirements on technical and economic considerations including potential constraint costs. Indeed a key reason for including the Beauly-Denny project as baseline expenditure was the robustness of the economic case against the future generation requirements.

2.5. It is therefore important that transmission licensees are able to progress network reinforcements on the wider infrastructure (also know as the Main Interconnected Transmission System or MITS) against the planned generation connections. This is also a key concern from a transmission licensee perspective of who bears the risk if the infrastructure is not available at the time of connection. Even if the proposals enable better queue management it is inevitable that investment will be required for efficient and economic development of the system. Any enhancements to the current arrangements must therefore ensure that efficient investment can be carried out to meet the requirements of users.

2.6. It is also important to distinguish the MITS (where there is the possibility of managing access through the balancing mechanism) and the local infrastructure that needs to be in place before the generator can connect.

2.7. It is our understanding that generators may need to know the local transmission requirements before they submit planning requests. For this reason, it is normal to apply for connection before consent has been obtained. It is also often helpful to progress Section 36 (generation) and Section 37 (transmission) consents in parallel.

2.8. Given the lead time for construction of MITS infrastructure, it is also extremely helpful to the transmission licensee to receive applications early on. Only receiving the application after obtaining planning consent risks the timetable for delivery of MITS reinforcement and possibly even of the local connection works.

2.9. An early application would enable the transmission licensees to identify and progress (to the extent that appears reasonable to them) any MITS reinforcements that are driven by technical and/or economic (i.e. constraint) limitations of the network. We believe that this would be essential in any revised access arrangements.

3. SSE Straw Man

3.1. SSE's straw man proposal builds on the and has the following features:

(i) Generator to apply for connection to suit generator's requirements (could be before or after getting planning consent) – as at present

(ii) NGET makes offer for connection within 3 months, specifying the local infrastructure work required to connect to the MITS and final sums (as at present). Potential MITS work is noted in the offer but its completion is not a pre-requisite of connection. (Fully firm access might not be available until MITS work is completed, but this depends on the variant of the model)

(iii) Generator accepts connection offer and final sums liabilities for the local infrastructure works.

(iv) Generator and transmission licensee progress obtaining the necessary consents for works. Note that on the basis of other accepted offers, the transmission company would also progress the consenting of MITS works consistent with GBSQSS and licence.

(v) On gaining consent (both generation and transmission for local works) the generator submits confirmation notice entering into commitment to pay TNUoS from 3 years after date of submission of notice.

(vi) Transmission local infrastructure and users facility is constructed

(vii) User connects

3.2. The above sequential procedure describes more fully how the arrangements might work in practice. However, there are a number of issues resulting from it that require further consideration.

3.3. The key question is what happens if the MITS reinforcement has not been completed by the time the generator connects? Again, there are a number of possibilities

(i) SO manages the system as at present using the balancing mechanism. This would mean that for the period until the MITS reinforcement was complete the constraint cost would be higher than economic.

(ii) Users whose firm access depended on the MITS work would be granted "less firm" access than other users. This would involve developing new commercial products for "non-firm" access.

(iii) Temporary technical solutions to manage "on the day" constraints (e.g. intertripping)

(iv) Others…

4. Key Benefits

4.1. This variation delivers a number of benefits:

- Projects not yet consented would continue to be progressed against the final sums obligation for the local infrastructure but a firm connection date would not be committed until the user had submitted a confirmation notice.
- Users with consent could issue a confirmation notice and be guaranteed access when after the predetermined period of, say, 3 years to allow generation and transmission construction.
- Separating the initial offer from the "committed" stage enables the transmission licensees to comply with the SQSS, since only when committed would there be a potential issue with SQSS compliance.
- It also allows the transmission licensees to carry out initial pre-construction route finding and other studies so that necessary infrastructure work can be brought forward once user commitment is obtained.
- Once committed, the transmission licensee can continue progress with the construction of the deeper infrastructure necessary to comply with its licence and, to the extent that the infrastructure is not available by the connection date, seek a derogation from the SQSS.

5. Risks

5.1. The key risk with this approach is that the required infrastructure work is not completed. The most likely reason for this would be delay or refusal in

obtaining the necessary consents. Should this occur, then a derogation from the SQSS would be required. One or more of the options identified in 3.3 above would need to be developed.

5.2. A general assumption with this model is that only a relatively small proportion of the generators who have currently applied for connection will obtain consent. This means that the potential costs of MITS work being delayed is relatively small. A further risk, therefore, is that a higher than anticipated volume of generation will obtain consent. This would mean either higher constraint costs, or higher unavailability under non-firm arrangements. There could also be a risk to security of supply if technical solutions such as intertripping become overly complicated.

5.3. The third risk is that of creating a consent queue. At present, the connection offers are phased against the forecast connection date, which is dependent on MITS upgrades. Therefore generators with a date several years out may not be progressing their projects. Instead of the rush to apply for connection that happened in 2004, a "connect and manage" approach may cause a new rush to obtain consents.

Assessment of SSE Straw Man Model for transmission access based on Ofgem's "Options Matrix"

Additional Capacity Release	SSE Model
1. What determines whether additional capacity is released?	Application for connection & local infrastructure Commitment Notice for additional capacity to start from committed date which is, say, 3 years from date of notice.
2. What do users need to commit to?	FSL for connection and local infrastructure X years TNUoS from committed date
3. What does the GBSO need to commit to?	Provide connection and local infrastructure subject to obtaining consents. Provision of export rights from committed date (provided connection and local infrastructure complete)
4. Who bears the risk of late delivery?	For discussion. The two options are (a) all users through BSUoS or (b) user through less firm export rights until infrastructure is completed
5. What generates (or limits) any associated costs of late delivery?	(a) not limited (b) not costs to general users but opportunity cost to generator
6. What are the products through which additional capacity is released, and do these products exist currently?	(a) TEC – currently available (b) Non – firm product – not currently available
7. What are the interactions between the GBSO's obligations to users under the licence and other obligations of transmission licensees?	Interactions between obligation towards users in relation to non-discrimination and other obligations with respect to economic development of the system and SQSS compliance. This would tend towards option (a) with mitigation of other obligations through derogation, supported by technical and commercial arrangements to minimise cost of late delivery

Existing Capacity Release	**SSE Model**
1. What do users need to do to secure a claim on existing capacity?	Existing users through current mechanism (year ahead TNUoS). New/incremental users in the same way as for additional capacity – application and commitment notice.
2. How are competing requests for capacity addressed?	New applicants granted access as from connection date. Limitations dealt with through balancing mechanism.
3. How is the volume of existing capacity established, and how are these expressed in terms of products?	Capacity determined through the planning process and SQSS. All users granted TEC
4. Do the necessary products exist currently?	Yes for TEC – other products may need to be developed depending which option for limiting costs of late delivery is chosen

Pre-Commissioning Security	**SSE Model**
1. What are the obligations of a user who has requested and is waiting for the delivery of additional capacity?	FSL on connection and local infrastructure only. Once commitment notice submitted, pays TNUoS from connection date
2. How do these obligations relate to actual out-turn cost of providing the additional capacity?	Not related to outturn costs of MITS work. (TNUoS based on standard costs in the model)
3. What risks are borne by other parties during this period?	Risk of "stranded investment" if users decides to buy out of obligation (i.e. just pays x years TNUoS). Transmission licensees would want this to be recovered through general TNUoS
4. How does this interact with process of procuring additional capacity?	N/A

Charging	**SSE Model**
1. How are the charges for additional capacity established? Are they fixed or variable?	Commitment to pay TNUoS according to methodology. (Note stability is a concern e.g. £10/kW swing for Skye zone from 2005 to 2006) Also issue with areas not yet connected (islands) – they will need to know the level of TNUoS when submitting the commitment notice.
2. How are the charges for existing capacity established? Are they fixed or variable?	TNUoS as at present
3. How are any costs associated with the late delivery of additional capacity recovered?	Through balancing mechanism

Revenue Restriction Interactions	**SSE Model**
1. What are the additional potential costs and revenues for (in the first instance) the GBSO relative to current arrangements?	Additional potential costs in BM if capacity is delayed, additional revenue through TNUoS (although total revenue capped to recover regulated costs). The detail depends on the option chosen for dealing with late delivery of capacity.
2. How should any such additional costs and revenues be reflected in the revenue restriction of the GBSO?	Additional BM costs need to be reflected in the SO incentive scheme if delivery of capacity is delayed.
3. How should any such additional costs and revenues be addressed in the revenue restrictions of the other Transmission Owners?	Additional investment should be allowed through the mechanisms being developed for the transmission price review.