User Seminars April 2009 Q&A
Edinburgh

Andrew Ford: GB Queue Management Update

Q1. Are any of the offers in the first 450 interactive?

No, there is either sufficient capacity identified to connect sites with firm offers or where system constraints are identified offers will be made using intertrips

Q2. Are the second 450 all consented? How does that fit in with the 'ready/willing/able'?

No, but requests for consents have been submitted:– Issue 3 (November 2008) of the GB Queue Management methodology details these projects as priority 2 on the ranking order within the "Ready" category, hence offers will be made in the 2nd phase of advancement offers.
http://www.nationalgrid.com/NR/rdonlyres/A80AD792-E2D7-4E1C-906A-D4476B2379AC/30316/GBQueueManagementMethodologyissue3Nov08v11.pdf

Q3. What is the percentage response rate for the Quarterly Reports? Does that impact on the CAP150 sites?

We are still seeing a 25% response rate, approximately. We welcome as much information via Quarterly Reports about projects as a User will provide. This information can be used in the CAP 150 process.

Q4. What capacity have National Grid got back through the free TEC review?

None as yet. We are currently progressing 3 formal responses and have rejected 1 on the basis that costs had been incurred.

Rob Smith: Constraint Management Update

Q1. Has the Procurement Guidelines deadline been extended until 29th April?

Yes

Q2. Would locational BSUoS vary on a half-hour basis? How would we know what the cost would be in 12 months?

The half hourly cost of Locational BSUoS would reflect the costs incurred by the System Operator in resolving transmission constraints in relation to

derogated boundaries in each half hour. If the cost of this, which is dictated by the price at which the SO can take actions to resolve these issues, varies then the costs in each half hour will vary.

The locational element, and the residual element, of BSUOS are both reflective of the costs that the SO incurs in operating the transmission system in each half hour.

National Grid provides a forecast of the annual average £/MWh BSUoS cost at the start of the year and any forecast revisions at its operational forums throughout the year.

The Locational element of BSUoS will be subject to the same degree of volatility as BSUoS is currently.

Q3. How do the 450MW & 457MW identified for advancement impact constraint costs?

It is our view that any additional costs of advancing the 450MW and 457MW are likely to be relatively low in relation to total constraint costs due to:
• The staggered or gradual connection of advancing projects;
• The fact that most advancing projects will connect after, or a short time before, the scheduled implementation of reform of Transmission Access arrangements in 2010/2011; and
• The potential for commercial or charging changes

Q4. What size are the different locational zones expected to be? Will the zones be Scotland and England/Wales?

At present the only derogated non compliant boundary is the B6 Cheviot boundary that separates the National Grid and Scottish Power transmission networks. However there is the possibility that further derogations on the transmission system may occur at other points on the network going forward.

Q5. Will existing and new generation bear the constraint costs?

The current proposal is that all generation that is exporting onto the network in settlement periods in which transmission constraints occur will bear a proportion of constraint costs equal to their relative adjusted MW position in that period.

Q6. Could this alter the wind farm map by influencing the decision of where to build wind farms and send developers into less favourable areas?

National Grid is not in a position to comment on the location that developers choose to build their projects.

Such a decision is likely to include an assessment of relative costs and likely achievable generation output levels to determine where to locate projects.

Q7. Does this impact Distributed Generation?

The initial proposal will not directly impact embedded generation however National Grid does intend to look at this issue going forward and may look to make amendments if deemed appropriate.

Q8. If the Boundary was compliant, would the TNUoS be different? Has Scottish Generation been overcharged since BETTA? What would location BSUoS be in a Connect & Manage world?

If the boundary was compliant the TNUoS charge would be as it is now.

We do not believe Scottish Generation has been overcharged. It has been charged a long run TNUoS tariff for capacity that has only been accommodated by short run SO costs. These costs are higher than the TNUoS tariff and are not targeted at specific transmission connectees but are socialised. Therefore it could be suggested on this basis that the TNUoS tariff, in zones behind non compliant boundaries, has not reflected the full cost of those parties accessing the transmission system.

Q9. Is all Generation affected by location BSUoS or just Transmission connected?

The initial proposal will not directly impact embedded generation however National Grid does intend to look at this issue going forward and may look to make amendments if deemed appropriate.

Q10. Is it correct that there was no appetite for CAP170 amongst the industry?

The CUSC panel voted 7 to 1 to recommend rejection of CAP170.

Q11. Is there a socialised element in calculating BSUoS?

BSUoS will include a locational and residual element. The residual element will be charged to all parties based on their MW utilisation of the transmission system in the particular settlement period.

Nigel Fox: Locational BSUoS – Effects on Charging

Q1. If you are sat behind 2 derogated boundaries i.e. B6 and B1, how does this impact on locational BSUoS?

The proposal is flexible enough to accommodate further derogations (either within year or at the start of a year) or nested multiple constraints.

The high level principles for calculating the applicable Locational BSUoS charges for generators connected behind multiple derogated non-compliant boundaries are as follows.

- The non-compliant volume of constraint actions, together with the spread cost of those actions and consequential balancing actions, must be discretely calculated for each noncompliant boundary, for each Settlement Period
- Generators will pay a cost proportional to the costs of resolving all derogated non-compliant boundaries to which their output contributes.
- In recognition of the efficiency arising from constraint actions that contribute to the resolution of more than one boundary, all boundary costs will be scaled to reflect this efficiency
- Locational BSUoS will be calculated as the appropriate, scaled boundary costs, apportioned to generators in proportion to their output in each Settlement Period.

For more detail, see *Locational BSUoS: Constraint Costing Methodology* on the following link (under section 8):

http://www.nationalgrid.com/uk/Electricity/Charges/modifications/uscmc/

Q2. Is there a reduction in TNUoS above the derogated boundary? Are you recovering twice i.e. once from connecting generation above boundary and again from TNUoS below boundary?

There is a reduction in TNUoS tariffs above the derogated boundary and a corresponding increase in tariffs across all zones to recover the increased residual component of the charge.

Q3. If the constraint is driven by wind, would you pay higher locational BSUoS even though you are unable to turn down?

When constraint costs are predicted to be high, we would expect the marginal cost generation to decide not to run and for overall constraints to reduce accordingly.

Q4. At what point is the constraints cost signal triggered to build more capacity?

One could argue that the trigger to build more capacity has already been reached with major Transmission investment plans in place.

John Greasley: Offshore Transmission Update

Q1. When OFTO regime kicks in will Bilateral Connection Agreements be amended to reflect this?

All offshore generators that connect at 132kV or above will be required to enter into Bilateral Connection Agreements with National Grid. We will be going through an exercise prior to Go-Live to migrate current contractual arrangements to reflect this.

John Greasley: Developing the Electricity Transmission System

Q1. What are the timescales for extending the ENSG to 2030?

We are currently in the process of finalising the 2030 Addendum to ENSG report. It is expected to be published in the near future.

Q2. How flexible are DECC and Ofgem with regards to reviewing decisions made by the ENSG to facilitate connections by 2020?

We are working with Ofgem/DECC on regulatory arrangements to facilitate strategic investment. We expect that this will provide transmission companies with incentives to progress with developments such as those highlighted in the ENSG report. It is hoped that this will deliver the flexibility that will be required.

Q3. Where are the new interconnectors going to be?

A new interconnector is currently being built between Britain and the Netherlands. Interest has been expressed in other interconnectors, for instance, Ireland – Wales, a further interconnector to France, and the possibility of an interconnector to Norway.

Q4. Are we thinking of subsea across Moray Firth as opposed to other reinforcements?

This is really an issue for the relevant Scottish Transmission Company, but this is being considered.

Q5. Are the reinforcement timescales detailed in the ENSG document realistic for projects planning to apply/connect?

The ENSG report and work that supports it include an assessment of the likely timescales to deliver the required transmission infrastructure. These

have been timed to ensure that the generation that needs to come on to contribute to meeting the 2020 targets is able to.

Q6. Does ENSG take into account Distributed Generation?

ENSG is primarily concerned with the transmission infrastructure reinforcements required. It has not explicitly taken into account distributed generation, but has been designed to accommodate overall flows of power, regardless of whether this is generated from transmission or distribution connected plant.

Duncan Burt's Round-up

Q1. Please give us a prediction for the completion of Beauly-Denny

Kenny Stott from SHETL stated that the Beauly to Denny reinforcement can be delivered within 3 Summers of consents being achieved. Michael McElhinney from the Scottish Government stated that they are on target to deliver a consents decision by the end of 2009.

London

Rob Smith: Constraint Management Update

Q1. Will the ongoing review of the GB SQSS impact the cost of constraints?

We will have a clearer understanding of this once the SQSS review is complete.

Q2 a) How does Ofgem's letter of 19th March (derogations to facilitate earlier connections) impact locational BSUOS?

If the generation from these connections impacts on the constraints that occur at a derogated non-compliant boundary then the transmission connected generation will bear a proportion of that cost. However it is our view that any additional costs of advancing the 450MW and 457MW are likely to be relatively low in relation to total constraint costs due to:
• The staggered or gradual connection of advancing projects;
• The fact that most advancing projects will connect after, or a short time before, the scheduled implementation of reform of Transmission Access arrangements in 2010/2011; and
• The potential for commercial or charging changes

b) How does this model manage multiple constrained boundaries?

The proposal is flexible enough to accommodate further derogations (either within year or at the start of a year) or nested multiple constraints.
See document *Locational BSUoS: Constraint Costing Methodology* on the following link:
http://www.nationalgrid.com/uk/Electricity/Charges/modifications/uscmc/

Q3. Location Charging and constraints Vs long-term Reinforcement plans:- How will these two worlds join up?

As reinforcement progresses the level of non-compliance will diminish. The resulting constraint costs and hence locational BSUoS costs should decline accordingly.

Q4. Going forward how will National Grid Electricity Transmission manage constraints on inflexible generation, such as wind?

Operating the system with a significant volume of wind generation will present challenges to National Grid. With this in mind, National Grid will shortly issue an industry consultation relating to operating the electricity transmission networks in 2020. This will be issued in May 2009 and will be available within the electricity area of http://www.nationalgrid.com

John Greasley: Developing the Electricity Transmission System

Q1. What are the timescales for delivering the two "boot strap" subsea HVDC links?

The western HVDC link is scheduled for delivery in 2015; the eastern HVDC link is scheduled for delivery in 2018

Q2. Will the HVDC "Boot straps" not just create or compound the congested network further south where they connect (ie at Deeside)?

No, the studies have also considered the necessary reinforcements further South on the network to ensure that this is not the case.

Q3. Is there any potential to connect Offshore in the Irish Sea to the west coast HVDC Link or the Irish Interconnector?

This is certainly a possibility and we would be happy to discuss these issues further as required.