

Transmission Access Review

June 2008 Progress Report

Working Group 1 – Short-term access¹

The working group is currently 'on target' against the work plan however, discussion of a number of the items (in particular overrun pricing and connect & manage) has identified a requirement for further detailed analysis which will be difficult to accommodate in the current timescales.

The proposal is to present the latest version of the working group report at the July CUSC panel meeting, with any gaps (and a clear description of the work outstanding and associated timescales) highlighted.

• **Overrun pricing**

The group has discussed three high-level models for pricing generation which is above aggregate long and short term access right holdings:

- Simple multiplier (e.g. multiple of TNUoS or BSUoS)
- Average cost (ex post price based on actual costs observed by the SO, including constraint costs and the cost of sterilised headroom)
- Marginal cost (ex post price based on the marginal congestion cost).

Further work is required to further understand the allocation rules under the average cost model, and the methodology associated with the marginal cost model.

• **SO release of short-term access rights**

National Grid has presented a straw man process:

- Users bid for a one-week block of short-term access 5 weeks ahead of real time
- National Grid assess the bids in price order
- The assessment involves a comparison of the bid price with the anticipated constraint cost caused
- Where the bid exceeds the anticipated constraint cost caused, short-term access rights will be released
- The next bid in the price stack will then be considered, etc.

The working group discussed whether greater transparency could be provided to users, but accepted that the interactive nature of the zones meant that assumptions about use would have to be made which would reduce the efficiency of release.

Further work on the timescales/duration of right proposed is required, along with the consideration of alternative methods of allocation.

• **Connect & manage**

The working group has considered the case for and against the socialisation of the additional operational costs expected with this regime.

The working group are developing possible future scenarios such that the associated costs (particularly constraint costs) and benefits (particularly carbon savings) can be calculated with and without a connect & manage regime.

The working group has also considered the appropriate eligibility criteria for connect & manage and the need for a time delay (e.g. 3 years) to allow wider transmission assets to be constructed.

¹<http://www.nationalgrid.com/uk/Electricity/Codes/systemcode/workingstandinggroups/wg161-164/>

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- **Issues to be discussed**
 - Access right sharing (consideration of notification process)

Working Group 2 – Long-term access²

The working group has addressed all the areas identified in the work plan to be covered to date. However, discussion of a number of the items (in particular security requirements) has identified a requirement for further detailed analysis, and it is very unlikely that it will be possible to accommodate this alongside the work still required on capacity auctions in the current timescales.

The proposal is to present the latest version of the working group report at the July CUSC panel meeting, with the areas of work outstanding (and a clear description of this work and associated timescales) highlighted.

- **Finite rights for existing users**

The group has discussed:

- The definition of the long-term access right
Nodal entry right to trade energy at the market hub (or NBP) for a user defined number of whole financial years.
The working group considered defining long-term access rights on a zonal rather than nodal basis, but agreed that a nodal definition (albeit with nodes potentially grouped into zones with a 1-1 exchange rate) was the most expedient solution.
- The associated charging arrangements
In particular, the working group have discussed whether the TNUoS (locational only or locational and residual elements) should be fixed for the duration of the booking. National Grid has presented analysis on the relative size of TNUoS residual and locational elements, along with the impact of fixing charges on prevailing or forecast tariffs based on previous “Condition 5” reports. Further scenario based work is required to gain a better understating of the risks/opportunities of this approach.
- The associated liabilities and securities
The working group agreed that users should face a liability to pay TNUoS charges for the duration of the booking. Further work is required to better understand the credit risk (and therefore security requirements) associated with existing (post commissioning) users, with many working group members unconvinced that a security greater than 1 year of the associated TNUoS charge is required.

- **Finite rights for new users**

The group has discussed:

- The appropriate liabilities and securities
The working group agreed that, as with existing users, new users should face a liability to pay TNUoS charges for the duration of the booking, with a minimum booking required to trigger the release of incremental capacity.
Further work is required to better understand the project risk (and therefore security requirements) associated with new (pre-commissioning) users.

²<http://www.nationalgrid.com/uk/Electricity/Codes/systemcode/workingstandinggroups/wg165-166/>

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Further work is required to revisit the analysis performed for CAP131 in order to determine the minimum booking required, in light of the proposed changes to the TNUoS charging methodology under consideration.

The working group agreed that the appropriate liabilities and securities for local assets should be considered by working group 3.

- **Issues to be discussed**
 - Capacity auctions

Working Group 3 – Enabling changes³

The working group is currently making good progress against the work plan. The development of local charging arrangements and the generation zoning methodology are proving to be very complex and are currently behind schedule. Discussion of a number of the other items (in particular treatment of the residual element of TNUoS and zoning criteria) has identified a requirement for further detailed analysis which will also be difficult to accommodate in the current timescales.

The proposal is to present the latest version of the working group report at the July CUSC panel meeting, with any gaps (and a clear description of the work outstanding and associated timescales) highlighted.

- **Local charging arrangements**

These arrangements are required to ensure that users of both short and long term access rights are exposed to an economic signal which reflects the cost of the local assets required to connect them to the wider transmission system. The arrangements are also required to ensure that the signal associated with local assets is sufficiently specific such that users that choose SQSS design variation connections receive the appropriate discount.

National Grid has presented three competing options to derive a local asset charge:

- Specific treatment of assets local to generation connections
A methodology is designed which consistently identifies circuit assets which are required to connect generation. These assets are considered to be “local” and can be treated specifically to give the appropriate cost reflectivity. Further work is required to define the methodology and test this against the many existing and future connection designs on the transmission system.
- Specific treatment of distance to zonal hub
A zonal hub is defined, with MWkm between generator terminals and zonal hub defined as local and MWkm between zonal and market hubs treated as wider.

In addition to the above, National Grid has also presented a potential substation asset signal, which could be used with either of the TNUoS options, to reflect the costs associated with substation assets at generation connection sites.

The working group have agreed not to progress a ‘deeper’ connection charging boundary option, principally because it would expose users to the costs associated with TO decisions taken for wider system reasons.

The working group have also discussed an appropriate CUSC definition of local works, expressing a preference for consistency between charging and CUSC definitions but noting that there is an interaction with defining acceptable zones.

³<http://www.nationalgrid.com/uk/Electricity/Codes/systemcode/workingstandinggroups/wg161-166/>

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- **Treatment of the residual element of the TNUoS charge**

The working group has agreed that long term and short term access users should contribute to the residual element of the TNUoS charge. The working group have discussed the following options to achieve this:

- Charge residual element on utilisation (/kWh)
- Charge residual element on local connection capacity (/kW)
- Charge residual element based on access products booked (/kW scaled by duration of booking)

Further work is required to understand whether these costs (non-locational assets, legacy investments, lumpy investments) should be socialised on a capacity or utilisation basis.

- **Zoning methodology**

National Grid has presented two competing high-level generation zoning methodology options:

- Scenario Zoning Methodology
This is based on existing network powerflows with boundary capabilities taken into account. This approach is expected to give the most accurate and least stable zones.
- Network Zoning Methodology
This is based on the existing network voltage angles but, as with the TNUoS transport model, boundary capabilities are ignored. This approach is expected to give the most stable and least accurate zones.

Further work is required to better define these methodologies and assess them against agreed criteria, including:

- Accuracy (and therefore impact on constraint costs) of zones
- Stability of zones
- Liquidity of zones

The working group agreed that governance of the zoning methodology should be under the CUSC due to the interaction with access right definition.

- **Issues to be discussed**

- Application process for local connection