Generator charging from 2010

1. Background

The charging arrangements implemented from 1 April 2005 saw the introduction of use of system charges for generators (GDUoS) along with a 'shallowish' connection charging boundary. Generators connected prior to 1 April 2005 (pre-existing generators) were not liable for GDUoS charges at the time of connection and may have made decisions under the assumption that this policy would continue. Ofgem has said that generators who connected prior to 1 April 2005 – who may have paid a deep connection charge - should receive a full rebate against the GDUoS charge until at least 2010, although they can opt in to the new arrangements before 2010 should they wish.

Ofgem has previously commented on this issue in the November 2003 initial decision document[1] on the interim arrangements, saying that common arrangements would be appropriate for new and old generators to provide the same economic signals.

Ofgem subsequently set out in the May 2005 consultation[2] on the structure of electricity distribution charges longer term framework that there should be a transition by pre-existing generators to the new GDUoS charging arrangements. Ofgem has committed to reviewing the position of pre-existing generators from 2010 as part of the longer term arrangements.

This paper provides some further thinking on the issues discussed at the 8 November ISG meeting. The objectives that a potential solution to this problem must be judged against are outlined and a more focused discussion of the options is undertaken.

2. Objectives

The prime consideration when discussing these options has been that pre-existing generators receive appropriate economic signals. The key idea underpinning the introduction of GDUoS charges has been that generators pay charges that reflect the costs that they impose on the system or alternatively generators would be rewarded for any benefits that they provide. When GDUoS charges reflect these costs or benefits generators can make an economic decision as to whether or not they change their behaviour in order to avoid paying the costs or in order to receive the rewards. In many cases, where there are no generation or demand related capacity constraints, it is anticipated that GDUoS charges will be low although the eventual outcome will depend upon the charging methodology that is employed.

The behaviours that would be influenced by GDUoS charges are generator siting, usage and decommissioning decisions. If generators do not believe it is in their economic interest to change their behaviour or are unable to do so then cost reflective charges will ensure that they are not being cross-subsidised by other network users.

---

[1] 'Structure of electricity distribution charges – initial decision'. Ofgem document reference 142/03.

[2] 'Structure of electricity distribution charges – consultation on the longer term charging framework'. Ofgem document reference 135/05.

The desire to see pre-existing generators pay charges that reflect their costs is not the only consideration that must be taken into account regarding the transition of pre-existing generators from their interim charging arrangements to longer term arrangements. In addition, property rights concerning the payment of use of system charges are unclear. Amongst the other objectives for a solution to this problem are:

- that it is as simple and transparent as possible;
- that it is proportional and minimises regulatory risk;
- that it delivers the best result for customers; and
- that it is non-discriminatory between pre-existing and new generators.

3. Options

The options for generator charging post 2010 that were discussed at the 8 November ISG were:

a) Do nothing

b) Introduce GDUoS charges with no compensation for deep connection charges

c) Introduce GDUoS charges with compensation for deep connection charges paid either:

   1) by valuing the right currently being enjoyed to access the system, e.g. by an ongoing rebate to use of system charges;

   2) by compensating generators for the change in the connection boundary from deep to shallow.

4. Summary of responses to 8 November ISG paper

There were six responses: four from DNOs and two from generators.

Five of the six respondents either preferred option c or agreed that it would be acceptable. Of these five, three respondents indicated that option c2 would be preferred. Two respondents indicated that option c1 did not take into account the right that was purchased by pre-existing generators at the time of connection, noting that 'it is the service obtained not the assets acquired' that is important.

5. Evaluation of options

Option a: The advantage of option a is that it would be extremely simple and would be easy to administer; however, it has a number of disadvantages.

Doing nothing would undermine a key objective of providing an economic signal to all generators by means of cost reflective charges. However, a DNO could contract directly with a generator to encourage behaviour beneficial to the DNO should it wish to do so. This could provide pre-existing generators with incentives to behave in a manner that would reduce the cost of long term network investment. For example, if DNOs could enter into contracts with generators to reduce their output in a generation constrained area a DNO could put back network investment thereby reducing its costs. An example of this would be a DNO paying a generator not to run at certain times in an area where capacity requirements are determined by the amount of generation connected.

The do nothing option would implicitly assume that the rights conferred upon generators when they originally connected to the distribution network were both for connection and use of system and that the right to enjoy free use of the system would extend forever. It would seem an unreasonable expectation that the system could freely be used forever, particularly with regard to joint use assets. This is because any assets that pre-existing generators will have contributed towards in order to reinforce the network as a result of their connection via deep connection charges will eventually need replacing. At this point if pre-existing generators rights are considered to be evergreen the costs of replacing these assets will be borne by other network users via use of system charges when cost reflectivity would demand that pre-existing generators should contribute towards this cost.

Furthermore, this option would lower the incremental cost of pre-existing generators relative to potential entrants into the generation market and would therefore be a barrier to entry for efficient generation interests.

Option b: As with option a, this would be straightforward to implement.

Unlike option a pre-existing generators would be subject to GDUoS charges and would therefore receive appropriate economic signals going forward.

This option would undermine the property rights that generators were perceived to obtain when they paid connection charges.

Option c: This option is theoretically the most palatable as it takes into account the fact that pre-existing generators connected under a different charging regime and seeks to compensate them for this. The option considers two methods of compensating pre-existing generators. With either method, a repayment could either be via lump sum or as a phased sum, for example an annual rebate.

1) The method of valuing the right at the level of use of system charges going forward and then effectively rebating pre-existing generators this amount against their future use of system charges would not provide these generators with an appropriate economic signal. If use of system charges for generators in a particular location were £5/kW under this option pre-existing generators would receive a rebate of this value against future GDUoS charges. Therefore if GDUoS charges in this location were to remain at £5/kW pre-existing generators would pay nothing if GDUoS charges rise to £7/kW then they would pay £2/kW. An appropriate economic signal would be that generators pay a charge that reflects the incremental cost of using the system that results from their behaviour relative to the incremental cost that is imposed by other network users. If the GDUoS charges are calculated using an appropriate economic charging model then from an economic perspective it would be more efficient if pre-existing generators were subject to the full GDUoS charge. Although pre-existing generators have obviously made a siting decision appropriate economic signals could influence their decisions regarding patterns of use of the network and timing of decommissioning.

2) Compensating pre-existing generators for the change in the connection charging boundary in either a one off or an annuity payment would ensure that incrementally they would paying a charge that reflects the cost that their behaviour imposes on the network (via GDUoS charges). Thus, this method would provide all generators with economic signals. This method of compensating generators would require an agreed method of calculating the appropriate level of compensation for pre-existing generators.

An issue that would have to be dealt with if option c is taken is the duration of the right that is enjoyed by pre-existing generators. It would seem appropriate that the

level of compensation that is provided to generators is influenced by the length of time that they have been connected to the network. One indication of the duration of the right could be tied to generators' typical financing period. A suitable cut off point could be 20 years. This would mean that generators connecting prior to 1990 would not be considered for compensation.

6. Next steps - views invited

Ofgem invites views as to the viability of option c2. In particular we would like to receive opinions on the following with relation to option c2:

- Is it workable?
- Does it meet the relevant licence objectives as well as the objectives described above?
- What information would be required in order to implement this option?
- Is there an alternative to this option that fulfils the objectives?

7. Further information required

In order to further explore the options for managing the transition of pre-existing generators to the longer term charging arrangements Ofgem requires the following information from DNOs:

- Details of DG connected under old 'deep' charging regime:
    - connection date
    - size of connection (MW)
    - whether deep connection charge was paid
    - how generators have been / will be treated with regard to joint use assets that have been / will be replaced after they had connected
- Details of the contract signed by generators at the time of connection.