

Amendment proposal:	Connection and Use of System Code (CUSC) CAP127: calculation and Securing the Value at Risk (VaR) CAP127		
Decision:	The Authority¹ directs that the Consultative Alternative Amendment proposal be made²		
Target audience:	National Grid Electricity Transmission PLC (The Company), Parties to the CUSC and other interested parties		
Date of publication:	17 May 2007	Implementation Date:	1 June 2007

In 2005 Ofgem approved a number of amendment proposals³ that brought aspects of its Best Practice Guidelines⁴ (the Guidelines) on credit cover arrangements for network operators into CUSC. In making these directions Ofgem noted that one area that could benefit from further development in relation to the CUSC objectives was the calculation of Value at Risk (VaR). This amendment proposal seeks to introduce a methodology for securing and calculating VaR into the CUSC.

The current methodology for calculating VaR set out in the CUSC is based solely upon User forecasting performance. Billing and payments under the CUSC for TNUoS charges are based on the User's system usage forecasts which are reconciled after year end. Therefore within any year the forecast VaR may be significantly low. This is because there is no mechanism that takes into account any activity that may result in increased usage by the User, for example adverse weather or increase in customer numbers. This arrangement disregards the seasonality associated with each supplier's VaR along with a number of other variables. Consequently the resulting level of VaR leads to under securitisation during the winter period and over securitisation during the summer period.

The Proposed Amendment

CAP127 aims to rectify this issue by considering all associated elements in the calculation of VaR and by introducing an element of seasonality, by dividing the year into a number of "security periods". It is proposed that the level of VaR to be secured in each security period is split between Base VaR (BVaR), comprising of those elements generally outside a User's control, and forecasting Performance Related VaR, in which a User does have control. Therefore, this proposal would determine a level of VaR for each individual User.

Base VaR (BVaR)

BVaR is calculated by considering the following elements:

¹ The terms 'the Authority', 'Ofgem' and 'we' are used interchangeably in this document. Ofgem is the Office of the Gas and Electricity Markets Authority.

² This document is notice of the reasons for this decision as required by section 49A of the Electricity Act 1989.

³ Decision and Notice in relation to Proposed Amendment CAP089/090/091: CAP089 Maximum Unsecured Credit Limit, CAP090 Credit Limits for rated Companies, CAP091 Establishment and Maintenance of an Unsecured Credit Allowance for Rated and Unrated Companies.

⁴ Best practice guidelines for gas and electricity network operator credit cover - conclusions document, 58/05

Weather conditions

It is possible that due to different weather conditions, a user's actual VaR can be affected by up to $\pm 3\%$ of their annual non half hourly (NHH) forecast liability and up to $\pm 6\%$ of their annual half hourly (HH) forecast liability.

Final reconciliation

An Initial Reconciliation is undertaken to account for any difference between Users demand forecasts and the demand observed in settlement data which has been received up to a time shortly after the financial year has ended. The Final Demand Reconciliation is undertaken to account for any difference between the set of settlement data used for the Initial Demand Reconciliation and the Reconciliation Final (RF) run of settlement data. This is carried out approximately 14 months after the end of the year.

National Grid observes that generally a supplier's final reconciliation will range between $\pm 2\%$ of the annual liability in the year concerned. Therefore as this value has a direct impact on the VaR it will be used in the calculation of the Base VaR profile.

Due to the accuracy of HH metering data, the likelihood of any liability outstanding after the final reconciliation would be low and therefore 0% of a user's HH annual liability was considered an appropriate level to be used in determining the HH Base VaR profile. A level of 1% of a user's NHH annual liability was considered an appropriate level to be used in determining the NHH Base VaR profile.

Triads

A Triad represents the average of the three days of a Users' highest system demands between November and February separated by at least ten days. The average triad dates since NETA Go Live in March 2001 will be used in determining the HH Base VaR profile.

Missed payments.

The proposer considers it probable that, by the time a winding-up order can be obtained against a defaulting supplier, at least two monthly payments will have been missed. Accordingly, it is proposed that Base VaR profiles be based on the assumption of two missed payments.

Forecasting Performance Related VaR

The second part of the VAR calculation is based upon the User's forecasting performance over a number of security periods. These quarterly periods are:

- 1 April to 30 June;
- 1 July to 30 September;
- 1 October to 31 December; and
- 1 January to 31 March.

The proposer believes that a more accurate calculation of value at risk and the securitisation of this in quarterly periods would result in a more appropriate level of security being held, which would be more efficient, thereby better facilitating the achievement of Applicable Objective (a); and would better facilitate effective competition (Objective (b)) by ensuring that an appropriate level of security was held for all parties.

In addition this would reduce the chances of bad debt being passed through to the industry.

Consultation Alternative Amendments (CAA)

It is proposed, as an alternative amendment, that one particular element of the VaR calculation, the provision for amounts invoiced but unpaid, is altered from that proposed in CAP127. The original proposal suggested that the value of two missed payments should be used in the calculation of BVaR, however the proposer of the alternative amendment believes the provision held should equate to 15 days' usage charges or half a month's invoice. The proposer believes this to be consistent with the maximum delivered unpaid liability up to the point at which the invoice was due for payment.

The proposer believes that this amendment will bring the calculation of VaR in line with the Guidelines as set out by Ofgem and will better facilitate effective competition (Objective (b)) by ensuring that an appropriate level of security was held for all parties, and which should reduce the risk of bad debt being passed through to the industry, and ensuring that the market is not unduly over securitised thus reducing barriers to entry.

Recommendation of the CUSC Amendments Panel⁵ (the Panel)

The CUSC Amendments Panel Recommendation Vote on CAP127 was conducted at the Panel Meeting on 30th March 2007. In summary the Panel voted that CAP127 would better facilitate the Applicable CUSC Objectives and was better than the current baseline and the Consultation Alternative Amendment. The Panel Members present unanimously believed CAP127 better facilitated Applicable Objective (a) and (b).

The Authority's decision

The Authority has considered the issues raised by CAP127, the Consultation Alternative Amendment and the final Amendment Report (AR) dated 11 April 2007. The Authority has considered and taken into account the responses to NGET's consultation on CAP127 and the Consultation Alternative Amendment which are attached to the AR. The Authority has concluded that:

1. implementation of the Consultation Alternative Amendment will better facilitate the achievement of the Applicable CUSC Objectives⁶; and
2. directing that the Consultation Alternative Amendment be made is consistent with the Authority's principal objective and general duties⁷.

Reasons for the Authority's decision

An important element of any network operator's credit arrangements is to have appropriate mechanisms to allow for the calculation and securing of the value at risk associated with trading with a network user. In the CUSC the current calculation of VaR is based solely on User forecasting which provides the opportunity for the User to under-forecast for a significant part of the year until the initial reconciliation takes place.

⁵ The CUSC Panel is established and constituted from time to time pursuant to and in accordance with the section 8 of the CUSC.

⁶ As set out in Standard Condition C10(1) of NGET's Transmission Licence, see: http://epr.ofgem.gov.uk/document_fetch.php?documentid=5327

⁷ The Authority's statutory duties are wider than matters which the Panel must take into consideration and are detailed mainly in the Electricity Act 1989.

Consequently the amount secured could be very low and not sufficient when compared to the level of trading undertaken by the User. In addition this methodology for calculating VaR does not take into account a number of variables that may impact the VaR.

Six responses were received to the December 2006 consultation of the original amendment proposal. Of these, two were supportive of the proposal with one respondent citing that the proposal better facilitates the relevant objectives of the CUSC as it offered the market increased protection against bad debt while not imposing onerous requirements on participants that could be a barrier to entry.

Two respondents took a contrary view, one believing that the proposal was overly complex and the calculation would be difficult to replicate and audit. This respondent indicated the complexity would consequently make it difficult for a supplier to forecast the level of collateral it is likely to need in the short and longer term. The other respondent felt that notwithstanding that the actions undertaken to recover a bad debt will result in two missed payments, requiring a User to post security to this level will have a negative impact on competition.

In addition another respondent felt that the penalties put forward for demand forecasting errors are too severe and that these measures may lead to excessive credit cover costs being borne by the market which are not proportionate with the risks faced by National Grid.

Five representations were received following the consultation period in January 2007 which included the consultation alternative amendment (CAA) proposal presented by BizzEnergy Ltd. Four of the respondents felt that the CAA proposal exposed the industry to an unacceptable level of additional risk. Three of these respondents felt that the original proposal provides a more accurate calculation of VaR especially as it is likely that two payments would be missed. The respondents consider that basing the calculation on a value that equates to 15 days usage will not secure sufficient collateral to fully cover the actual liabilities of a defaulting User.

One respondent was fully supportive of the CAA as it believes that this proposal is more in line with the Guidelines and presents a more balanced approach to managing the risk between the National Grid and the User. This respondent also held the view that this proposal assists in reducing what they believe is an excessive amount of cover that would need to be secured under the original proposal.

Ofgem welcomes the efforts the industry have made in developing CAP127 and the consultative amendment proposal as a means of dealing with the issue of User forecasting error. Ofgem notes that the complexity of the proposal is borne out of the unique way in which TNUoS charges are calculated and billed and therefore the necessity to include the variables discussed above into the calculation of VaR.

Ofgem also welcomes the addition of quarterly security periods as these provide for the VaR to be reassessed to reflect the appropriate level of risk taking into account seasonal activity of the User and therefore agrees with the view that this element of the VaR calculation would go some way to better facilitate the Applicable Objective (b) of the CUSC.

However Ofgem is concerned with the missed payment element of the calculation which is predicated on a defaulting user missing two payments whilst remedial action is being undertaken by National Grid.

Ofgem considers that the calculation of VaR ought to be based on unpaid liabilities under normal trading conditions. Hence VaR should be determined by considering the value of unpaid invoices plus 15 days' usage. Ofgem understands that the payment regime under CUSC is based on forecast usage, and bills are issued at the beginning of every month with payment due on the 15th day of the month in question. Therefore it can be argued that for the first 15 days of the month a User is in debit and then in credit for the remainder of the month. Further, during the initial months of the billing cycle, a User is likely to be overpaying in relation to his actual usage, since he is likely to have forecast heavier usage over the winter but his payments are split into 12 equal instalments.

The proposer of the Consultation Alternative Amendment is of the view that because of the arrangement described above the VaR calculation should be predicated on the value of 15 day usage and not the value of two missed payments as this represents a closer alignment to the VaR calculation presented in the Guidelines.

In the development of the Guidelines, Ofgem having regard to the promotion of competition and the structure of the market, adopted a number of guiding principles in relation to the management of risk to the network operator and the levels of credit that a User would need to secure to trade effectively within that market. These principles included, inter alia, a consideration that credit arrangements should not be unduly discriminatory, or hinder competition and should provide a secure and stable business environment to all parties.

Ofgem considers that the missed payment element of the calculation is predicated on a User becoming insolvent rather than being based on the day to day functioning of a trading market and therefore does not sufficiently take into account users who do pay bills on time and the credit worthiness of those users. Further it is Ofgem's view that it is inappropriate to consider two missed payments within the BVaR calculation as it would result in over-securitisation of balances owing by users who paid their bills on time. This would both impose unnecessary costs and raise barriers to entry.

It is also Ofgem's view that the likelihood of any particular user becoming insolvent is already taken into account in determining the amount of unsecured credit to be made available. To assume, as the method proposed by CAP127 implicitly does, that all users have an equal probability of defaulting is to double count this risk. Bearing these points in mind, Ofgem has advocated in the Guidelines a very strict regime in the event that a User does go into default. Further, so long as the Network Operator is able to demonstrate compliance with these guidelines and show that it has taken action quickly, it will be entitled to 100% pass through of all irrecoverable debts.

Ofgem also welcomes the introduction of the appeal mechanism to allow the users the opportunity to clarify their position to National Grid if it is shown there was no reasonable prospect of them being able to forecast accurately.

Considering the points made above it is Ofgem's view that on balance, the CAA would better facilitate achievement of the applicable objective (b) of the CUSC by facilitating effective competition in the supply of electricity as it allows for the suppliers to post a more appropriate and reasonable level of security and reduce a potential barrier to entry for new suppliers.

Decision notice

In accordance with Standard Condition C10 of NGET's Transmission Licence, the Authority, hereby directs that consultation alternative amendment be made, and that it shall be implemented on 1 June 2007.



Mark Feather
Associate Director, Industry Codes and Licensing

Signed on behalf of the Authority and authorised for that purpose.