

**The National Grid Company plc**

**Minutes of the  
Grid Code Review Panel  
National Grid House, Coventry  
21<sup>st</sup> November 2002**

**Members/Alternates**

Andy Balkwill (AB)  
David Payne (DP)  
Geoff Charter (GC)  
Patrick Hynes (PH)  
Nasser Tleis (NT)

Mike Kay (MK)  
David Gilliland (DG)

Bridget Morgan (BM)

John Norbury (JN)  
Graham Trott (GT)  
John France (JF)

David Ward (DW)

Malcolm Taylor (MT)

Francois Boulet (FB)

Roger Salomone (RS)

Brian Sequeira (BS)

(No Rep)

National Grid (Chair)  
National Grid (Secretary)  
National Grid  
National Grid  
National Grid

Network Operators

OFGEM

Generators with Large  
Power Stations with  
total Reg. Cap.> 5GW

Generators with Large  
Power Stations with  
total Reg. Cap.< 5GW

Generators without Large  
Power Stations

EISO

BSC Panel (Alternate)

Suppliers

Non Embedded Customers

**Advisors/Observers**

Robert Lane (RL) CMK

Ben Graff (BG) NGC

Charlie Zhang (CZ) LPC

David Nicol (DN) EISO

**1 APOLOGIES FOR ABSENCE**

1294 Apologies were received from Edgar Goddard (Chairman), Chris Rowell (BSC Panel - represented by Roger Salomone) and Ian Gray (DNO representative).

**2 APPROVAL OF MINUTES OF PREVIOUS MEETING**

1295 Minute 1235 - CZ pointed out a minor typing error.

1296 Minute 1242 – CZ asked National Grid to clarify if a generator submitted NTO/NTB of less than 2 minutes whether National Grid's software substituted the submitted time with a defaulted 2 minutes. PH stated that this was not the case. Any submissions of less than 2 minutes were used as submitted and NTO/NTB times shorter than 2 minutes were not an issue.

1297 Minute 1273 - CZ noted that it appeared that the Generic Provisions Working Group would be considering only Licenced generation and asked how licence exempt generators in the 50-99MW range which would be considered. NT explained that in this case the DTI would ask National Grid for comments on any application for licence exemption and National Grid may ask the DTI to include certain conditions on the exemption. However NT felt that this should be more fully discussed at the next GPWG meeting.

1298 Minute 1279 - The report on CUSC Amendment CAP010 indicated that there was no associated Grid Code impact identified. However CZ felt that as the intention of the amendment is to make use of Bid/Offer prices for the calculation of generation costs then a change to BC1/BC2 would be required. GC pointed out that the amendment was associated with post event BSC processes and was not related to BC1/BC2 timescales. JN and JF also did not believe that a change to the Grid Code would be required. However National Grid agreed to review CAP010 and confirm whether or not there was an associated impact on the Grid Code.

(Post Meeting note: The Authority has now rejected CAP010).

1299 The minutes were otherwise agreed as a true record of the previous meeting.

### **3 MATTERS ARISING FROM PREVIOUS MEETING (not covered below)**

#### **3.1 Summary of actions (GCRP 02/24)**

1300 Action 1164/1246 – GT suggested that although the paper indicated that this action was complete, the issues related to Time Tagging of Dynamic Data etc were ongoing and should not be removed from the action list. JN stated that the presentation by PH at the last meeting had been extremely helpful and Panel members had taken away National Grids suggestion to build business cases to enable associated issues to be taken forward. However with the current number of changes and workloads being faced by the industry it was difficult to build such a business case at present. JN requested that these issues be held open for consideration should a suitable opportunity arise in the future.

1301 AB suggested that National Grid develops an 'Issues List' so that items such as this could be kept under review. JF reminded members that just such an "issues list" had been effective in keeping track of outstanding issues during the development of a NETA GCode.

1302 **Action:** *National Grid to develop Issues List and circulate by January 2003.*

1303 All other actions were either complete or to be discussed under later agenda items.

#### **3.2. Governance Issues**

1304 AB stated that this agenda item had been added as an action from the last meeting (1239). At the last meeting GCRP members had been requested to reconsider paper GCRP 01/26 (BSC or CUSC Modification Proposals having an impact on the Grid Code) and comment on whether the proposed approach was still appropriate and other views on GCRP governance. AB Reported that no comments had been received to date.

- 1305 DN stated that although he did not believe that paper GCRP 01/26 covered his concerns with GCRP governance raised at the last meeting, he had already voiced these concerns at that Panel meeting and in writing to the GCRP secretary.
- 1306 GC stated that DN's concerns seemed to highlight the differences between the Scottish GCRP and the E&W GCRP processes in that in Scotland consultees tended to be GCRP members and full discussion of consultations could take place at GCRP meetings. With E&W process the consultations were much wider.
- 1307 MT stated that paper GCRP 01/26 focussed on consequential Grid Code changes arising from CUSC/BSC amendment proposals and that the need for this process was likely to become more frequent and it may be that the issue would become even more problematic in the future.
- 1308 JN stated that the consultation process associated with the Grid Code changes related to BSC Mod proposal P87 illustrated the benefits of debating consultations more fully at the GCRP rather than dealing with issues by e-mail. JN felt that most issues could have been discussed at GCRP meetings but appreciated that the need for urgency would have to be considered.
- 1309 AB suggested that the need for small working groups to consider issue associated with consultations may need to be reviewed. AB invited further views and suggestions from Panel members on how to handle these issues.
- 1310 **Action:** *GCRP members invited to provide suggestions on how to handle issues associated with urgent consultations.*

### **3.3/3.4 Review of OC1 and OC2 (GCRP 02/25 and 02/26)**

- 1311 DP explained that internal National Grid Groups were currently considering the existing provisions of OC1 and OC2 to ensure that current and future practise is accurately reflected.
- 1312 With respect to OC2 issues had been identified relating to the collection and processing of OC2 data and these long-term issues were included in National Grid's review of internal systems. The internal OC2 working group was currently focussing on clarification and updating of the existing OC2 text.
- 1313 MT asked if there was a view as to when the long-term issues identified were likely to be resolved. PH stated that it was currently expected that the review of internal systems was expected to be completed early in 2003 and a report to the February GCRP was expected. The review would consider what would need to be done to improve OC2 processes. It was expected that the February report would present a possible way forward and GCRP views may be sought at that stage. It was not expected that detailed software change proposals would be proposed in February.
- 1314 With respect to OC1 DP explained that the main issue was related to the notification of Customer Demand Management. MK stated that paper GCRP 02/26 referred to 'current Market information' and asked for clarification on what this meant. It was explained that this referred to the fact that Physical Notifications should reflect any Customer Demand Management being undertaken by Users but this did not currently appear to be the case. National Grid's Shanti Majithia had been consulting with Users on how to improve the quality of information. MT pointed out that Shanti had also raised these issues at National Grid Operational

Forums but it was also possible that Customer Demand Management may be overtaken by proposed changes in charging methodologies which were currently the subject of a consultation. MT suggested that paragraph 6 of the paper should be amended to include possible changes in network use of system charging. A decision on charging was expected by the end of January 2003 and should feed into the review of OC1.

- 1315 DP expected to come back to the February GCRP with more detailed proposals for changes to OC1 and OC2.

### 3.5 Intertrips (GCRP 02/27)

- 1316 AB explained that this item was included following an action (1279) from the February GCRP meeting and the paper had been prepared by National Grid's Isabelle Haigh.
- 1317 GCRP members generally felt that the paper should include more detail on the type and need for intertrip schemes.
- 1318 JN felt that the Grid Code itself should contain more detail on the circumstances when intertrip capability would be required. JN was concerned that as intertrip schemes are often a requirement of Bilateral Agreements and Grid Code provisions oblige the use of intertrips under certain circumstances there was little incentive for National Grid to enter into commercial arrangements. JN considered that it was essential that the technical requirements that might be specified by the Bilateral Agreement, such as intertrip, should be underpinned by the provisions of the Grid Code.
- 1319 Other Panel members were concerned that it was not clear whether or not intertrip schemes were mandatory.
- 1320 DW also stated that National Grid's policy should be to review the need for intertrips as the system develops as some intertripping schemes existed as a result of CEGB custom and practice.
- 1321 National Grid agreed to expand paper GCRP 02/27 to describe the categories of intertrips more fully, the principles behind the decision to use intertrips and examples of types of intertripping schemes. MT also suggested that section 8 of the paper should be enhanced to clarify that although some BM Units may receive 'windfall gains' others may experience cataclysmic losses from the use of intertrips.
- 1322 **Action:** *National Grid to expand paper GCRP 02/27 to include more detail on the types and use of intertrips.*

## 4 REPORT ON PROGRESS OF CONSULTATION PAPERS (GCRP 02/28)

- 1323 D/01 – Provisions relating to Embedded Large Power Stations. The Authority continued to consider the report.
- 1324 A/02 – Implications to Grid Code of CUSC Amendment to clarify CUSC 6.5.1. The Authority was currently considering the report.
- 1325 B/02 - Grid Code references to PES and STS and other housekeeping changes. Implemented as Revision 8 on 30<sup>th</sup> September.

- 1326 C/02 – Beyond the Wall, One hour Gate Closure and Use of Dynamic Data. Implemented as Revision 8 on 30<sup>th</sup> September.
- 1327 D/02 – Proposed changes to GRID Code OC5. Approval now received for proposed Grid Code change and implementation date of 6<sup>th</sup> December agreed.
- 1328 E/02 – Proposed changes to Grid Code OC8. A number of responses had been received that did not agree that a change was necessary. National Grid was considering these responses and would be replying to them shortly.
- 1329 F/02 – Proposed changes to Grid Code BC2 associated with BSC Mod Proposal P87. A number of responses had been received and National Grid was currently considering these.
- 1330 G/02 – Clarification of Phase Unbalance term and change of company name. Responses due by 6 December.

## **5 PROGRESS ON CURRENT GRID CODE MODIFICATION PROPOSALS**

### **5.1 CC.6.3.3 Working Group (GCRP 02/29)**

- 1331 NT provided an update on the progress of the working group and explained that the working group had agreed that the existing Grid Code provisions for frequencies above 49Hz were adequate and should be retained.
- 1332 However difficulties arose when trying to determine whether to retain or relax the existing provisions for frequencies below 49Hz. If retained there was a risk of CCGT plant tripping and resultant demand disconnection and island collapse. If relaxed there would be an increase in customer demand disconnection and risk of island collapse in the event of severe islanding conditions. JF commented that much useful work had been done, and that all the Working Group members were continuing to make a significant effort in trying to justify the correct minimum GCode requirement below 49Hz. However, JF also noted that CCGT operators and manufacturers indicated that increased risk of tripping due to current cc6.3.3 although present, was not quantifiable.
- 1333 In answer to a comment from MT, NT explained that islanding was a very rare event but working group analysis had identified that if the situation arose and there was a deficit of embedded generation a further stage of customer demand management would be required. In the event that the generation deficit was large (say 50% +) then there was a risk that customer demand management would be insufficient with an associated risk of island collapse. However assessment was problematic as the situation had never arisen and testing would be difficult. The working group was currently considering a qualitative view of the relative magnitude of risk and once this had been assessed it would be possible to move forward.
- 1334 JN pointed out that all generators accepted that there would be a risk of plant tripping when operating below 49.5Hz. However, the risks were different for each type of plant and established technology plant would probably present the lowest risk.

- 1335 GT stated that the working group had been giving much thought to these issues but there were risks associated with all options and the difficulty would be with achieving the right balance. However if it was not possible to make a case for relaxing CC.6.3.3 provisions then there seemed to be no alternative but to recommend that the existing provisions be retained.
- 1336 NT went on to say that there were further working group meetings scheduled and it was intended for the Working Group report to be finalised for the February GCRP meeting.

## **5.2 Embedded Power Station Working Group Update (GCRP 02/30)**

- 1337 GC provided an update on the working group progress. Any Grid Code changes arising from the working group were dependent on what changes were made to other documents. This may or may not include changes to the Distribution Code.
- 1338 The next meeting of the working Group was scheduled for 2<sup>nd</sup> December and this meeting would be a joint meeting with the Distributed Generation Technical Steering Group Workstream 2, which is dealing with rationalisation and standardisation of data exchange.
- 1339 MK stated that the drivers for the two groups were different but there was a need to recognise that there was an overlap in the scopes of the groups.

## **5.3 HVDC Interconnectors Working Group Update (GCRP 02/31)**

- 1340 GC provided an update on working group progress. The working group had met on a number of occasions and had discussed draft Grid Code provisions originally tabled in paper GCRP 02/05. These discussions had resulted in amendments to the original proposals and also had raised further issues to be considered. These were detailed in Appendix 3 of paper 03/31. It had also been recognised that the Generic Provisions Working Group (GPWG) had been initiated and the work of the HVDC group would be passed over to the GPWG to take forward as part of those discussions.
- 1341 MT stated that section 3.1 of the paper captured areas for concern and for the avoidance of doubt the Generic Provisions group should consider the issues raised in both appendix 3 and section 3.1. System to system provisions should also be considered.
- 1342 GCRP members agreed that the HVDC Interconnectors work should be picked up by the GPWG.

## **5.4 Generic Provisions Working Group (GCRP 02/32)**

- 1343 DP stated that the initial meeting of this group had been held and the second meeting was scheduled for 29<sup>th</sup> November.
- 1344 At the first meeting there was concern that there were no representatives from the windfarm 'community'. This had been rectified and the British Wind Energy Association would be represented at the next meeting.
- 1345 The working group had also refined the Terms of Reference to include all existing and anticipated systems.

- 1346 AB stated that any developments arising from the working group would need to be taken forward in parallel with BETTA.
- 1347 JN asked whether it was intended that the GPWG would consider the apparently unnecessary requirement for obligatory ancillary services (i.e. frequency response and reactive power). This had also been a problem encountered by the embedded generation WG and interconnector WG. DP felt this should be referred to the GPWG.
- 1348 CZ asked whether the Terms of Reference would be limited to licenced Generation. Group discussions would be focused on but not necessarily limited to licenced generation.
- 1349 DP stated that the working group expected to provide a more detailed report to the February GCRP meeting followed by a final report in May.

## **6 NEW GRID CODE RELATED ISSUES.**

### **6.1 Governance of Electrical Standards (GCRP 02/33)**

- 1350 BG presented the paper which was concerned with Ofgems proposals regarding the governance of electrical standards. BG explained that it was hoped that GCRP members would agree a procedural way forward at this meeting and posed the question as to whether a joint venture approach should be taken with the Scottish GCRP and the DCRP.
- 1351 MK had chaired the DCRP meeting on Ofgem's Governance of Electrical Standards proposals and he outlined to the GCRP the discussions the DCRP had had on this issue. MK explained that the associated issues probably represented a greater change of procedures for the DCRP than the GCRP. DNO's recognised that Ofgems 10 key points needed to be investigated and the DCRP had already held a meeting specifically to address the best way forward on these issues from a DCRP perspective. MK expected the DCRP would probably set up a working group to consider its own procedures and Ofgems proposals and would possibly employ a consultant to carry out the detailed work. However the DCRP recognised the value of a joint working group exercise with the GCRP and Scottish GCRP especially in the early high level stages of the process of determining general principles. This generic exercise could result in a generic report to the three panels, following which it would be for the panels individually to think through the next steps in relation to the three codes. MK explained that the DCRP had agreed that the formation of a joint working group would be a sensible way forward, subject to the agreement of the GCRP and the Scottish GCRP.
- 1352 BG asked the GCRP whether they saw merit in a joint approach and were agreed that it provided the most sensible way forward. BG also highlighted that it might be sensible to establish a specific parallel GCRP Group – which could feed into the joint working group as appropriate. Perhaps even more significantly, establishing a separate GCRP Group at this stage would save time when considering the generic report from a GCRP perspective – which would be helpful given that Ofgem had requested that panels had implemented measures in relation to their proposals by the end of Q2 2003.
- 1353 Panel members agreed to this joint working group approach subject to the agreement of the Scottish GCRP.

- 1354 The GCRP agreed that they were happy for MK to chair the joint working group and to keep the GCRP updated on progress, which MK agreed to do. DN pointed out that the next Scottish GCRP meeting would be on 5 December and he would put these proposals to that meeting recommending that the three Panels work together.
- 1355 Panel members expressed concern that Ofgem had not identified what exactly constituted a technical standard and generic discussion followed on this point. It was suggested for example that only those standards referenced in the Grid Codes and Distribution Code should be included. MK felt that Users and Ofgem might not share this view. BG pointed out that the aim of working group would be to determine which standards were appropriate to include. Ofgem would be expecting the Panels to make proposals by Q22003 followed by an Ofgem audit in Q32003. A common view from the three Panels would help to persuade Ofgem on which standards to include.
- 1356 BG asked for GCRP nominations to both the joint working group and the GCRP group to be made to AB by the 28<sup>th</sup> November. It was expected that the GCRP working group would report on proposals to the February GCRP meeting.
- 1357 **Action:** *GCRP members to provide nominations for a joint working group and a GCRP working group by 28<sup>th</sup> November.*
- 1358 **Action:** *BG to present a paper at the next GCRP meeting setting out progress. BG also agreed to ensure that the GCRP were informed of any significant developments in the work of both the joint group and the GCRP group as appropriate.*

## 7. BETTA

- 1359 BM provided a brief update on progress with BETTA. It was expected that Ofgem would be issuing its Grid Code consultation paper by the end of November. This would be one of a set of consultation papers which will also include CUSC and BSC.
- 1360 BM also stated that an Ofgem expert group continued to consider various SO/TO models and minutes arising from this groups meetings are available from Ofgem's website.
- 1361 MT expressed concern on the industry's ability to provide meaningful responses to BETTA consultations planned by DTI/Ofgem given the number of consultations proposed over a limited time. MT noted that according to DTI/Ofgem's timetable there should have been 10 consultations issued to date but so far there had been only one. Moreover although the timetable for issuing the consultations was being pushed back there was no corresponding movement of implementation dates. Panel members supported MT's concerns and agreed that Ofgem's timescales needed to be believable and also needed to be followed. BM noted the concerns and agreed to report back to DTI/Ofgem. However BM noted that 6 weeks would be allowed for Grid Code consultation and also reported the Grid Code consultation paper had now been agreed by Ofgem and that the document was currently being considered by the DTI.

## 8 OTHER GRID CODE RELATED ISSUES

### 8.1 BSC/CUSC Modification Proposals (GCRP 02/34)



1362 Update on modification proposals which may have an impact on the Grid Code:

BSC Modification Proposals

1363 With respect to P80, GC explained that it was likely that changes to Grid Code BC2 would be required but those changes could not be determined until the legal drafting associated with P80 had been developed. It was pointed out that the P80 Alternative was in fact similar to the P87 Alternative and it may be that as a result the Grid Code changes associated with P80 may be minimal.

1364 JN was concerned that making only minimal changes to the Grid Code would not go far enough as P80/P87 raised wider issues which should be considered. However AB pointed out that the Grid Code changes would only be those required as a direct consequence to P80 and any wider issues should be raised separately.

CUSC Amendment Proposals

Grid Code changes arising from new Capacity Terms proposed in CAP 043 (GCRP 02/35)

1365 AB explained that National Grid originally believed that CAP043 had no consequential impact on the Grid Code. However it is now felt that the terms Transmission Entry Capacity (TEC) and Connection Entry Capacity (CEC) should be included in the list of Standard Planning Data items in the Planning Code. It was stressed that this change was not be required as a condition for the approval of CAP043. AB explained that this data would be submitted as required under the Planning Code but it was not intended that Users submit the data twice and the data provided in Appendix C of the Bilateral Agreement is the data that would be used.

1366 With respect to CEC JN asked if it would be sufficient for a User to submit Registered Capacity data and expect National Grid to determine the value of CEC based on the capacity of National Grids physical assets. AB stated that in the CAP043 Working Group National Grid's view was that CEC was not associated with the capacity of National Grid assets and this was the majority view of the CAP043 Working Group. The minority view was that CEC should reflect connection asset capacity. However the responses to the CAP043 consultation may provide a different view. JN then questioned the need for a separate CEC submission if it was to be based on Registered Capacity as suggested by National Grid. GC stated that the introduction of CEC may lead to a review of the need for Reg Cap which may not be required in the future.

1367 JN felt that it would be helpful for the outcome of the CAP 043 consultation to be considered before commencing any Grid Code consultation. Panel members agreed to this approach.

1368 **Action:** *National Grid to prepare a consultation paper based on paper GCRP 02/35 taking into account the views expressed during the CAP 043 consultation.*

**8.2 GCRP Meeting Dates for 2003 (GCRP 02/36)**

1369 DP stated that this paper had been provided for information. However it was pointed out that the venues for the meetings may be different depending on progress with the relocation of National Grid Companies corporate centre. DP also

reminded Panel members that the process for re-nomination of Panel members would commence soon and a letter would be circulated shortly.

### 8.3 Grid Code Website Update (GCRP 02/37)

1370 DP explained that a review was underway to update the Grid Code website such that the structure was similar to the CUSC website. It was proposed to add an archive section for past papers and other documents and also to add a section for working group minutes and agendas. Panel members generally welcomed the update but also commented that the current website was helpful and easy to use. Panel members further views on website content were invited by the end of November.

1371 **Action:** *GCRP members to provide comments on updating of the Grid Code website.*

### 8.4 Proposed change to Data Validation, Consistency and Defaulting Rules (GCRP 02/38)

1372 PH explained that the paper described a change to the Grid Code to update the reference to the Data Validation, Consistency and Defaulting Rules as a result of a proposed change to the defaulting rules in relation to Interconnector data. This change was required to enable interconnectors to default data to zero in line with EU rules. The proposed changes were detailed in the paper along with proposed new text for the defaulting rules. However PH stated that since the preparation of paper GCRP 02/38, an alternative approach had been suggested to the one described in the paper.

1373 Panel members suggested that before any consultation paper was issued National Grid should allow Interconnector parties in France and Scotland to consider the alternative proposals.

1374 **Action:** *National Grid to prepare a draft consultation paper for discussion with Interconnector parties followed by formal industry consultation on proposed changes to the defaulting rules.*

### 8.5 Report from Scottish GCRP

1375 DN provided a brief report on Scottish GCRP issues.

1376 DN stated that the Scottish GCRP consultation on proposals for the inclusion of provisions covering windfarms in the Scottish Grid Code was reaching a conclusion. It was expected that the change proposals would be submitted to Ofgem shortly. DN explained that the Report to the Authority would include proposed provisions enhanced by any comment received from Scottish GCRP members or others where appropriate. DN was not certain whether the report would be publicly available which would depend on the final content of the report.

1377 DN also stated that Version 8 of the Grid Code had been issued in August but as a result of some minor errors this had recently been reissued as version 8a.

1378 DN further stated that the next meeting of the Scottish GCRP would be considering the issues related to governance of electrical standards.

**9 ANY OTHER BUSINESS**

1379 Andy announced that Geoff Charter would be leaving the company at the end of December and so this would be Geoff's last GCRP meeting. Andy thanked Geoff on behalf of the GCRP for the considerable contribution he had made to the GCRP since he joined in 1995. Geoff was presented with a leather bound Grid Code as a memento of the time he had spent with the GCRP.

**10 DATE, TIME & VENUE OF NEXT MEETING**

1380 Thursday **6<sup>th</sup> February 2003**, starting at **10:30 am**, at National Grid House