# Minutes and Actions Arising from Meeting No. 45 Held on 18<sup>th</sup> November 2010 at National Grid House. Warwick

Present:		
David Smith	DS	Panel Chairman
Stewart Whyte	SW	Panel Secretary

**National Grid** 

John Greasley JG Member Steve Curtis SC Member Tom Ireland TI Member

Graham Stein GS Presenter (Item 13&14 – Voltage control and FRT)

Ian Pashley IP Presenter (Item 6 – EDL)

Sam Wither SWi Presenter (Item 5 – Dynamic parameters)
Steven Lam SL Presenter (Item 5 – Reactive Power)Presenter

Brian Taylor BT (Item 7 – Working Group reports)

Generators with Large Power Stations with total Reg. Cap.> 3GW

John Morris JM Member John Norbury JN Member Campbell McDonald CMc Member

James Anderson JA Alternate Member Guy Phillips GP Alternate Member

Michelle Dixon MD Presenter (Item 5 – dynamic parameters)

Generators with Large Power Stations with total Reg. Cap.< 3GW

David Ward DW Member

**Generators with Small and Medium Power Stations Only** 

Barbara Vest BV Member

**Network Operators in England and Wales** 

Mike Kay (via MK Member

telephone)

Alan Creighton AC Member

**Network Operators in Scotland** 

Neil Sandison NS Member

**Relevant Transmission Licensees** 

**Generators with Novel Units** 

Guy Nicholson GN Member

Sigrid Bolik (via SBro Alternate Member

telephone)

Ofgem Representative

Shaun Yi SY Alternate Member

Steve Brown SB Member

**Non Embedded Customers** 

Alan Barlow AB Member

**BSC Panel Representative** 

John Lucas JL Member

## 1. Introductions/Apologies for Absence

1448. Apologies for absence were received from Jim Barrett, Alan Michie and Graham Vincent.

## 2. Minutes of Previous Meeting

#### GCRP - 23/09/10

1449. TI updated the Panel on the extensive comments that had previously been made by the Panel regarding the September minutes. He let the Panel know that the minutes had appeared on the web almost 6 weeks after the GCRP meeting. The minutes that appeared on the web, were the original minutes that were sent out two weeks following the September meeting with the comments made by the Panel highlighted in red on the web version. This shall be the approach that National Grid will take in the future with all of the minutes for the GCRP meetings so that the rest of the industry has visibility of the GCRP discussions, as per the technical secretary's comments at the September panel meeting regarding the minutes.

#### Minute process

- GCRP meeting
- Draft minutes sent to panel members for comment (GCRP + 10 working days)
- Panel members have 3 weeks to comments (GCRP + 25 working days)
- Minutes amended to incorporate comments and posted on National Grid website

The minutes that appear on the website shall be original draft minutes plus amendments. The amendments will be highlighted in red. This should hopefully bring clarity to what comments have been made therefore making it easier for panel members to locate the incorporation of their comments.

- 1450. Other amendments requested at the meeting were by GN, who asked SW if the end of minute 1425 could be removed as he felt the meaning of the sentence had been lost in the minutes when trying to paraphrase what was being said. NS pointed out that he had asked if National Grid had sent any instructions to embedded wind farms not if National Grid were allowed to despatch MVAr on DNO networks. Both of these changes have now been made.
- 1451. The minutes were approved as an accurate representation of the September GCRP meeting by the Panel.

## 3. Review of Actions (pp10/27)

- 1452. The majority of the actions from the previous meetings were the subject of agenda items, except for:
  - (Minute 1289) Simultaneous Tap Changing

A short guidance document shall be circulated to GCRP members and all authorised electricity producers, initially in draft form for comments before being issued to GCRP members for forwarding to their power station sites.

Action: National Grid(SC)

#### (Minute 1363) E3C - complete

At the last Panel meeting in September CMc enquired whether all embedded generators were aware of the new G59 settings. TI informed the Panel that at the last

DCRP (Sept) an update was given of the progress the DNOs had made in determining the status of the embedded generators on their networks. All generators should have been approached to either change their protection settings or report back if technical reasons prevented this. Progress had been made on changing protection settings but there was still further work required to complete the exercise. The Panel requested that TI raises this point further at the next DCRP in order to get a more detailed status report. This update is to be circulated around the GCRP before the next Panel meeting due to the urgency and important of the issue. TI was also asked to stress the importance of such changes to system security.

Action: National Grid (TI)

- (Minute 1365) Protection Fault Clearance Times and back-up protection ongoing.
- (Minute 1368) Time Tagging of Dynamic Parameters and NTO/NTB

At the September meeting DS made the Panel aware a consultation document was due to be published on BM replacement. JN commented that the consultation did not appear to mention time tagging of dynamic parameters, which is an item on the GCRP outstanding actions list. JN suggested that the GCRP should be directly involved in this process from a business perspective. DS commented that he will get the National Grid lead on the BM replacement Shafqat Ali to attend the next GCRP meeting.

**Action: National Grid (DS)** 

 (Minute 1370) – Codification of Generic Requirements currently included in the Bilateral Connection Agreements

TI updated the group that National Grid has reviewed the Appendix F5s and feels that the creation of CC.A.6 has resulted in the removal of the generic requirements that used to reside in the F5s. The A/10 section of the F5s had been put in to ensure continuity with current proposed Grid Code amendments.

JN commented that as well as removing the old generic requirements National Grid may wish to review the introduction of new requirements. JN wished to understand the rationale for recently putting the A/10 compliance wording in the Appendix F5, given that this has not yet been approved by Ofgem. JN queried if it was to alert the industry to an impending change to the Grid Code and suggested if this was the case it could, for example, be included within the offer letter. DS told the Panel that he would look into how this uncertainty over a modification which is taking a long time can be managed.

**Action: National Grid (DS)** 

(Minute 1371) – System to generator intertripping schemes

This issue is a direct consequential action of F/08 and affects offshore generation only. The Grid Code states that the breaker to be tripped for an intertrip should be the PPM CB. There was a belief at the time of the development of F/08 that many offshore intertrip schemes will in actual fact trip the OFTO/ONTO breaker. TI confirmed that currently the OFTO breaker is tripped in some instances but this is limited to transitional projects. For the enduring projects the generator breaker will be tripped.

■ (Minute 1409) – A.O.B

TI indicated that the intention was to include the OC2 chart reformatting change into the Grid Code when the F/09 changes go through in December 2010.

Action: TI (National Grid)

(Minute 1426) – Future frequency response service - complete

The action was taken back to the group and has been resolved.

(Minute 1429) – Grid Code Requirements for Electronic Communication Facilities

#### between NGET and BM Participants - complete

Slide pack was circulated round the group.

■ (Minute 1431) – A/10 compliance - complete

TI confirmed National Grid was considering the appropriateness of an industry consultation day.

■ (Minute 1445) – Environmental Obligations - complete

Consultation was circulated round the Panel

■ (Minute 1446) – Solar Storm - complete

A National Grid policy statement was sent to the Panel. JM noted that this was more of a generic policy paper for solar storms and stated in 2012 it was likely to be the more severe solar storm. TI spoke to the author who confirmed National Grid are aware of the 2012 event having the potential to be more severe and also the E3C may address this matter.

## 4. Grid Code Development Issues

**Grid Code Consultation Update** 

- 1453. TI gave a summary of the current status of Consultation Papers. The key highlights being: the consultation for Environmental Assessment (F/10) had closed on the 12<sup>th</sup> November; 6 comments had been received. National Grid said that it will publish the report to the authority the following week.
- 1454. Some Panel members felt that with the outstanding items a speed/urgency column should be added so that the Panel can prioritise its workload. TI shall add this to the outstanding issues document for the next Panel meeting.

Action: National Grid (TI)

#### **Grid Code Development Issues**

#### Delegations of Authority

1455. TI informed the group that Network Operations Centre had approached all the DNOs: all but one have signed. The next priority is to approach the Generator Companies on a bilateral basis to discuss whether the company would like to sign a DOA contract. Due to resourcing constraints it is estimated that it will take a further 12 months to get round all of the GenCo's. Consequently it was agreed this will be discussed at the November 2011 Panel. A Panel member suggested that TI should distribute a generic DOA to the GCRP to expedite matters.

**Action: National Grid (TI)** 

#### Revision to the Development Issue template

1456. A member suggested that the Outstanding Development Issues matrix would be more informative if it included an additional column for "Issue Urgency", which was agreed to be included for the next Panel meeting.

**Action: National Grid (TI)** 

#### 5. New Grid Code Development Issues

#### Two Shift Limits

1457. Michelle Dixon of Eggborough Power Limited joined the group to present an item on Two Shift Limits (TSL) and the associated Grid Code definition. The Grid Code definition is contained in OC2.A.10 where the TSL is defined as "the maximum number of times that a Genset may be De-Synchronise per Operational Day."

Michelle highlighted Eggborough's understanding which is that the TSL is the maximum number of de-synchronisations the generator can have within that day. In Michelle's opinion other large generators whom she had spoken with shared this view. CMc commented that SSE interpret it exactly the same as Eggborough and stated SSE generators would not desynch a further time in one 24hr period. CMc also told the Panel that he had spoken with Jim Barrett who also sits on the Panel and he was in agreement with Eggborough's understanding.

- 1458. Michelle described the events which had lead to this query of the Grid Code. On the 5<sup>th</sup> October T\_EGGPS-4 was asked to de-synch following an offer period to keep it on load. Merrill Lynch (EMC for Eggborough) queried this instruction from National Grid as it would have meant a TSL of 2 in Eggborough's opinion. National Grid accepted this position on this occasion. The following day National Grid offered the unit on at 05:55. At the end of the normal 4 hr offer National Grid did not extend the BOA and the unit was asked to de-synch. Merrill Lynch queried this instruction as in there opinion this contravened their TSL of 1 as they had a synch (16:00) and desynch 21:50 of their own later in the day.
- 1459. National Grid position is that a TSL indication of 1 is for the maximum number of de-synchs associated with the Balancing Mechanism. JN noted that the TSL was in the Operating Code and not the Balancing Code and suggested that if applied in balancing timescales via BOAs there would need to be transparency of these actions. JG said that National Grid will confirm the approach with the industry and confirm that it is consistent for everyone. National Grid shall establish a position with the industry currently and shall bring a paper to the GCRP Feb to sort out the ambiguity in the Grid Code.

**Action: National Grid (SWi)** 

#### Reactive Power – CAP169 and E/09

- 1460. National Grid has been working diligently to resolve a consequential issue of the accepted CAP169 proposal by the Authority. The consequence being that National Grid is not allowed to issue a reactive despatch instruction to ANY embedded power station that has an operational restriction specifically a **Reactive Despatch Network Restriction**, and cannot be despatched or paid for MVAr instructions which is placed on the embedded generator by the network operator. This also prohibits the payment for reactive services to those embedded generators which have a restriction in place. This means restricted plant beneficial to the transmission system, from a security of supply and economical standpoint, can no longer be used. This was never the intention of the original proposal and since the alternative proposal was accepted (made without any consequential analysis being done) National Grid and other members of the BSSG has been trying to resolve this issue.
- 1461. SL presented the current options that the BSSG is considering to resolve this issue which involved possible amendments to the Grid Code and the CUSC. National Grid's preferred option was to amend the Grid Code definition of a **Reactive Despatch Network Restriction** to include only those generators which could not provide 0 MVAr, thereby allowing a zero amount to be paid to those generators at unity power factor. An additional option was discussed at the BSSG where the Grid Code definition should remain technically accurate and the commercial impacts in relation to payments could be amended within the CUSC. The Panel agreed for the reactive power proposal to be developed further at the BSSG.
- 1462. NS stated that he was fully supportive of the modification to the Grid Code and understood the commercial need for National Grid to despatch embedded generators MVAr outputs to zero. However he raised concern that a reactive despatch would have an instantaneous effect on voltage seen by other DNO users. On reading the proposed change it assumes that NG have a right of despatch unless they have "received notification pursuant to the Grid Code". This leaves the Generator with the potential confusion should a despatch from the TSO be in

conflict with the requirements of the DNO, particularly if the network is abnormal. To bring clarity to the situation, NS proposed that the following wording be included in the Grid Code "For the avoidance of doubt any Reactive Despatch by the DNO shall take priority and will be carried out without delay" should be included in the code.

## Approach to Developing Technical Requirements for New Generation Technologies in the Grid Code

1463. GS presented a paper to the Panel to remind the members of how the industry had amended the Grid Code to accommodate the new wind turbine generators as part of H/04. JN believed this paper was helpful to the Panel to show the governance process followed. GN stated that he thought the opportunity had been missed to consider how new technologies may be incorporated in the future.

## 6. Working Groups - In Progress

#### Frequency Response & technical sub group

1464. TI updated the GCRP that the technical sub group had been set up and had had its first meeting with representation from TSOs, DNOs, manufacturers, large generators and wind farm developers. The technical sub group has been created to deliver to the joint BSSG/Grid Code working group the technical specifications for future frequency response and synthetic inertia. TI asked the Panel to agree TOR extension for Sept 2011 delivery. The Panel agreed that the TOR of the working group could be extended to September 2011.

#### Harmonics

- 1465. JG told the Panel that this Working Group is progressing along satisfactorily. The group has a very good representation of network operators, manufacturers, OFGEM, generators and directly connected customers. There have 3 main topic areas discussed at the meeting were: the best location of the filtering equipment; data gathering of harmonic information and allocation rights to pollute. The allocations to pollute, is drawing on knowledge from international experience of this issue.
  - Grid Code Requirements for Electronic Communication Facilities between NGET and BM Participants
- 1466. An update of the work to consider the requirements for an automatic logging device on BM Units was given by IP. The Working Group has had a first, and last, meeting in August 2010. Proposals from this meeting were that, rather than specify a requirement for EDL on a control point basis, it should be specified as a requirement where the generator is required to provide a mandatory service in CC.8.1 of the Grid Code. IP has not been able to complete the working group report to date because of other pressures but agreed at the Panel to circulate it before the end of December.

Action: National Grid (IP)

1467. At the Working Group meeting there was a debate around bid volumes associated with bid level and physical notifications. However, this is covered in the PNs from Intermittent Generation: IP commented that the group supported the taking forward of this issue by the PNs from intermittent generation working group.

#### 7. Working Group Reports

PNs from Intermittent Generation

- 1468. BT provided a final report on Physical Notifications (PNs) from intermittent generation. This working group was established to deal with the difficulty of forecasting Active Power from Intermittent Generation and therefore providing accurate PNs. The scope of the group was to look at three parameters that could be used for forecasting the power from wind turbines output useable, Physical Notifications and Maximum Export Limit. BT told the Panel that National Grid data does show that PNs from intermittent generation have been improving over the last year. There was some discussion around which PN this was; the one at 11am the operational day before or the one immediately prior to gate closure BT stated both are important. The group has concluded that the PN should be in line with Good Industry Practise. NS asked if National Grid does its own forecasting of wind. BT said that it does.
- 1469. The amendments that are required to the Grid Code are currently limited to a change to the definition of BC2.5.1 regarding accuracy of PNs. However, the group did discuss if MEL could be linked to Power Available and therefore updated automatically could be used within gate although this may need some IS development.
- 1470. BT stated that the Panel also discussed the accuracy of the PN on BOA payments. BT outlined the effect of physical notifications on payments for BOAs. For all generation this based on PN. BT outlined a case where a wind generator would be overpaid if the PN was above the Active Power being generated and the generator receives a bid to reduce output. JN pointed out that, in his view, issuing BOAs to wind farms with payments based on the submitted PN is unlikely to be an efficient process. BT proposed that a new joint BSC/GC working group be set up to address this issue. The Panel accepted this and DS commented that he will speak to Elexon about setting up this group. BT shall be sending out a consultation document shortly.

Action: National Grid (DS) Action: National Grid (BT)

#### 8. Report Consultation Comments

#### F/10 – Environmental Assessment

1471. National Grid received 6 comments that were broadly supportive of the amendments, to be made to the Grid Code General Conditions, to include environmental assessment associated with all Grid Code modifications. National Grid intends to submit a report to the authority in late November.

#### D/10 – Frequency and Voltage Operating Range

1472. TI told the group that the consultation document had been published and 5 responses had been received: 1 in favour of working group option 1 (48.5Hz continuous) and 4 in favour of working group option 2 (49Hz continuous). GS asked for some more time to further substantiate the need for continuous envelope down to 48.5Hz as per option 1 or else recommend a different conclusion. The GCRP agreed to give this time and GS shall now come to February GCRP Panel meeting with an update on whether option 1 or option 2 should be the final working group conclusion.

Action: National Grid (GS)

#### A/10 – Compliance

1473. National Grid has listened to the industry comments on the A/10 Consultation and is currently redrafting the A/10 proposals. The two major proposed changes are that the compliance process shall be removed from the CCs and a new section the Compliance Process (CPs) shall be added. The testing shall be moved to OC5. The also informed the Panel that the consultation document should be available in December. The also informed the Panel that National Grid was minded to recommend no changes to current LEEMPS compliance arrangements. The effect of this would be to remove the previously proposed obligation on NG to undertake

compliance testing for LEEMPS at the request of the DNO. AC questioned the process by which this particular change, considered to be important by DNOs, had emerged from the consultation responses. This is a direct result of the consequential code changes.

## 9. Pending Authority Decisions

- B/09 Category 5 intertrips
- 1474. The B/09 proposal has been rejected by the Authority alongside the associated CUSC Amendment Proposal.

## 10. ENTSO - E and Europe

1475. HU updated the GCRP on National Grid's involvement in the ENTSO-E pilot process for establishing a network code. HU informed the Panel of the opportunities to get involved in the process: the slides from Helge's presentation shall be sent round the group.

**Action: National Grid (SW)** 

1476. HU made the GCRP aware that the requirements cover generation down to 400W. This is because of the magnitude of smaller units that are connecting to European Grids: in June 1.2GW of PV were installed in Germany alone. HU showed the group some examples of the European Grid Code. One of which was the LFSM requirements which are different from the UK in that there is an LF trigger. HU informed the Panel that some of the requirements are regional and others are fixed within the Code. JM asked National Grid if with its knowledge of the code they could provide a list of those which are regional and those that are fixed to the Panel. JG agreed National Grid could help the Panel and conduct this exercise.

Action: National Grid (HU)

1477. There was extensive discussion around the involvement of National Grid in the development of European Network Codes, to date. JG informed the Panel that National Grid had been obligated to participate in the process as a Transmission System Operator (TSO) as a result of the EU Third Package and that Helge Urdal had been active member of "Requirements for Generators" Drafting Team. JG confirmed that National Grid's role at ENTSO-E discussions was restricted to representing its views as a TSO, and that it was not representing the views of market participants more generally. JG continued that National Grid had taken the opportunity at previous GCRPs to inform the Panel about the process and how they could engage with it. Several Panel members suggested that the GCRP should produce a joint response to the informal consultation of the pilot Network Code whilst other members believed that each company should submit their own response as consensus would be impossible to reach and therefore views would be watered down. GP informed the Panel that he had provided input into a previous stage of consultation via his parent company but had not seen the views presented being taken into account at the next stage. GP then asked whether the AEP would be able to respond on behalf of GB GenCos.

#### 11. BMU Configuration of Power Park Modules Offshore

- 1478. SC presented on the matter of BMU configuration of Power Park Modules (PPM) Offshore and the potential implications of changing BMU configurations for National Grid as TSO in co-ordinating OFTO network and Offshore Generator arrangements.
- 1479. SC stated that these implications potentially include the management of fault infeed, reactive capability and frequency response available from each PPM. CMc commented that reactive capability was required to be delivered at the Onshore Interface Point in any case so this is no reason to prevent reconfiguration of the offshore PPM. SC agreed, but asked the panel to focus on fault level issues as

these more clearly demonstrated the need for common understanding of the offshore arrangements.

- 1480. The panel also discussed the ability of a generator to parallel the MITS. It was felt that this may be possible for switching timescales, but not longer.
- 1481. To increase clarity of the standard operational configuration of an OFTO network and Offshore PPMs. SC proposed that a standard BMU Configuration Diagram displaying standard running of the offshore network and PPM/BMU arrangements be agreed between National Grid and the Offshore Generator each year as part of OC2.4.2.1.
- 1482. To ensure a common operational understanding of arrangements and coordination of the network and generation configurations, National Grid will update this diagram in operational planning timescales as required, typically at week ahead, and provide this Amended BMU Configuration diagram to the generator. Subsequent changes to the Amended BMU Configuration diagram may also be required, and revised versions will be issued as soon as is reasonably practical.
- 1483. Due to time constraints on the day and the length of time this agenda item was taking it was felt that it was best to use this presentation to sort out the intricacies of offshore in a working group.

Action: TI (National Grid)

## **12. BESC**

- 1484. TI gave a presentation informing the Panel of the process by which a User can move its asset from National Grid's safety rules to its own. This is achieved under National Grid's internal G3/9 process and Users should contact Steve Bath of National Grid for further information, where site specific discussions can be instigated between local site staff and safety representative from both organisations. TI also informed the Panel of the Safety Accord which is a national initiative being developed by the National Skills Academy (Power) and the ENA to develop a way of allowing safety qualification accreditation between organisations. The Panel agreed that this issue should be further progressed on a bilateral basis.
- 1485. Regarding the new requirement for annual AP Refresher training, NG advised that its training centre, Eakring, was investigating computer based training facilities to assist generators in meeting National Grid's new requirement for annual training. It was also confirmed that the training fee of £1200 was per session for up to 6 people and not per person.

## 13. Continuous Voltage Control

- National Grid has previously highlighted that there a number of sites that have installed Hybrid Statcoms which, in National Grid's view, do not "continuously" control voltage as specified in the Grid Code. National Grid has come to this view over the last year through the compliance process. This view arises because when the switches which have been used to control static elements take time to recharge and when a capacitor is switched out it is then unavailable for a certain amount of time while it discharges: GS highlighted in some instances this was as long as 10 minutes. GN stated that the performance of the equipment was apparent from the outset and that National Grid's view of its compliance had changed. He asked for the issue to be elaborated on as no evidence had been presented that capability of the equipment had caused a single problem to date. In his view the Panel should be provided with an assessment of the costs and benefits of the proposed revised Code interpretation.
- 1487. National Grid's proposal is that for an interim period Hybrid Statcoms should be allowed to have a delay of up to 15s for repeated switching as this aligns with

current DAR timescales and up to two seconds for capacitor discharging. The Grid Code requirement for continuous voltage control would be interpreted in this way until 1<sup>st</sup> January 2013, at which point National Grid would wish to see all subsequent installations capable of being fully continuously acting and therefore always available. JN commented that because of plant procurement lead times and existing contractual commitments, the proposal to make continuous operation a requirement by 1<sup>st</sup> Jan 2013 would be unrealistic and impact adversely on developers. JN suggested that a later implementation date of 1<sup>st</sup> April 2015 would be more realistic. Of the 4 options presented in the presentation the Panel agreed on option 3<sup>1</sup> - that this topic could be taken to consultation. GS will prepare a consultation document to be sent to the Panel.

**Action: GS (National Grid)** 

#### 1. Footnote

This paper was presented outside of the expected Governance of the Panel and it was felt by a Panel member that for this reason they had been misrepresented, with respect to the decision made by the Panel at the meeting.

## 14. Fault Ride Through: active power recovery

- 1488. GS presented this item on Active Power recovery following a transmission system fault. It was presented to explore an issue raised by Sigrid Bolik at the September GCRP Panel meeting. The previous paper highlighted the issue of a fast active power recovery following a short duration fault on the mechanical loading of the turbine.
- 1489. GS highlighted the background to the need for the requirement. The NETSSQSS defines a loss of power infeed to the transmission system triggered by unbalanced and balanced faults as a secured event (i.e. needs to be secured). The 500ms timescale was introduced in Grid Code amendment H/04 in which a delay greater than 500ms was deemed unacceptable due to the adverse impact on frequency following the fault. GN stated that while this may be a problem when there is a significant amount of this plant, which could not meet this Fault Ride Through, requirement it would not impact on the security of the system if there was only 150MW of this plant on the bars. In addition the larger turbine would have a much better performance than current Grid Code requirements for long duration faults. SW agreed with this statement but asked whether this specific case should be dealt with a potential derogation from the Grid Code. SB and GN would like to have a further meeting with National Grid to discuss options for this type of plant and its future commercial opportunities in the UK market.

#### 15. System Incident Report

- 1490. Not covered at the meeting due to time constraints.
- 16. Revision of CC7.7 (Maintenance Standards)
- 1491. Not covered at the meeting due to time constraints.
- 17. Meeting dates 2011 meeting governance review
- 1492. Not covered at the meeting due to time constraints.
- 18. Impact of Other Code Modifications or Developments
  - CUSC
- 1493. Not covered due to meeting time constraints
  - BSC
- 1494. Not covered due to meeting time constraints

#### Cross Code Forum

1495. Not covered due to meeting time constraints

#### 19. A.O.B

#### Dave Ward's retirement from the Panel

1496. DW has served for 20 years on the Panel and it was with regret that he said he was going to be retiring from Magnox at the end of the year and therefore this would be his last GCRP Panel meeting. DW asked the Panel about the Panels arrangements for a replacement: if they had no one else in mind he had a keen young engineer at Magnox who would happily take his place. DW will send through the new GCRP members contact details to National Grid.

Action: DW (Gens <3GW)

## 20. Date of Next Meeting

1497. It was proposed that the next Panel meeting will be an EGM probably via teleconference to cover the agenda items that were not competed at this meeting. It is thought at this stage it will probably be some time toward the end of December.