

Minutes

Meeting name	Offshore BMU Configuration Working Group
Meeting number	1
Date of meeting	8 th September 2011
Time	12:00 - 16:00
Location	Room B2.7, National Grid House, Warwick, CV34 6DA

Attendees

Name	Initials	Company
Graham Stein (Chair)	GS	National Grid
John Towie (Technical Secretary)	JT	National Grid
Steve Curtis	SC	National Grid
John Norbury	JN	RWE
John Lucas	JL	Elexon
Jane Mcardle	JM	SSE
Sarah Graham	SG	ScottishPower Renewables
Hannah McKinney (Dialling In)	HM	EDF Energy

Apologies

Name	Initials	Company
Mick Chowns	MC	RWE

1 Introductions/Apologies for Absence

1. Hannah McKinney was not available to dial in to meeting.

2 Current Situation & Description of Issue

2. Presentation given by SC - titled *Offshore BMU Configuration* - with the purpose of clarifying Offshore Network definitions and their application, through switching examples, with the purpose of reconfiguring offshore BMUs.

3 Agreement of Terms of Reference

3. It was identified that a SO-TO Code Committee (STC Committee) representative, stated as a member in the terms of reference, was not in attendance.

Action: National Grid to confirm that no STC representative was available.

4. Agreement was reached that offshore BMU Configurations should remain initial focus of the working group. Consideration of onshore configurations could be undertaken once group members had established an understanding of the relevant issues.

Action: SC & SG to investigate specific onshore configuration examples for the group to consider

5. The Working Group agreed that the scope, particularly sections 7 and 10, requires rewording to add clarity to the purpose of the group.

Action: GS to refine sections 7 & 10 of scope and circulate for comment.

6. It was agreed that a completion date of November 2011 could not met and therefore it would be revised subject to working group progress over the next meeting.

4 Working Group Discussions

Offshore Network Definitions & Switching Examples

7. Offshore network definitions, slides 5 to 15 of the presentation, were discussed at length with SC leading on the slide material.
8. Advantages and disadvantages to network operators and generators of different numbers of BMUs, as applied to the slide examples, were discussed as a result of a query from JL. SG commented that fewer BMUs were easier for a generator to manage due to higher number of turbines per BMU. More BMUs would however require more discrete meters, probably at the LV side of transformer which, as commented by GS, could be preferred due to greater flexibility, ease of determining 'what is coming from where' and applying responsibility.

9. GS queried whether BSC K3.1.4g (as amended by P237), which defines the criteria for combined offshore BMUs, was restricted to offshore. It was agreed that it does not with SC adding that the process of combining onshore BMUs - applying for non standard BMU - is the same as offshore, where applicable.
10. Working Group members expressed the view that the 'switching group' definitions, particularly that within BSC K3.1.4A (as added by P240), lacks clarity. JL offered to circulate a note to the Working Group, containing his thoughts on the definitions, for clarification purposes. Following this JL highlighted that the Working Group needed to retain a purely operational focus and not on the correction of these definitions.

Action: JL to circulate note on switching groups to Working Group.
11. Referring to the 'switching group' definitions, BSC K3.1.4D (as added by P240) was interpreted to specify that a 'switching group' should meet the criteria of BSC K3.1.4A, BSC K3.1.4B, or BSC K3.1.4C but not more than one at the same time.
12. Discussion of the PPM Availability Matrix, as in BC1.A.1.8.1, raised concern at the lack of data for connections between turbines. It was also considered to be unclear that a table should be provided for each PPM.
13. When switching Offshore Generating Units/Strings between PPMs of different BMUs within Switching Group, switching example 2 of the presentation, GS asked whether this could be via 'open then close allowing for switching time'. JN stated that this was a valid approach; however SC stated his view that this was not the case. This was identified as an area to clarify.

Pre Defined Configuration Scenarios

14. A number of Working Group members were receptive to a proposal to draw up a range of standard network configurations in response to particular scenarios, in advance of the event. This particular aspect was discussed at length between attendees.
15. JM commented that her organisation had considered a number of standard configurations which would be adopted in 'outage on transformer' scenarios. It was proposed that for an event such as this, a range of five pre-agreed configurations, for example, would be available for the Generator to select from and simply indicate to NG - SC indicated he would be happy with this method. SG commented that in some cases configuration options could be limited due to cable/transformer ratings. A number of specific actions arose from this discussion:
 - Action: Generator representatives to investigate standard configurations further, including;**
 - **How often reconfiguration (maintenance) occurs & the length of time it takes to reconfigure.**
 - **The effect shifting turbines has on transformers (ratings).**
 - **How paralleling is managed by a generator.**
 - Action: GS to quantify impact of reconfiguration on fault levels & whether it is therefore a valid concern.**
 - Action: GS to clarify National Grid's interpretation of the 'no paralleling' criteria.**
 - Action: SC to confirm whether CEC is applied to BMU or PPM.**

16. The key issues identified for further discussion were;
 - Communication between National Grid, the OFTO and the Generator - particularly in times were a situation arises were a standard configuration has not already been looked at and agreed upon.
 - Format & quantity of the submitted data.

- When/where the data should be submitted.
17. Initial discussions investigated the possibility of knowing all possible configurations. SC indicated that lots of unnecessary configuration information and diagrams associated with this approach would be undesirable. SG responded by commenting that Generators wouldn't want to be bound to one option and instead would prefer a range of 5 configurations per scenario to choose from, for example. GS suggested that a possible solution could be that a total number of configurations, across a number of scenarios, were submitted and that, perhaps via the Balancing Codes a process could be implemented whereby generators would be able to "state we are on configuration X of Y, for example".
 18. SC highlighted that for reconfigurations National Grid would need to know how Generator PPMs would respond. JN commented that a "number in the box" approach, as opposed to submission via drawings, would be a better approach. If pre defined configuration data is utilised, only the configuration reference (e.g. 1-5) would need to be transferred with the PPM Matrix could be used to capture further required details, as added by JL.

Other Industry Standards

19. A brief discussion, initially raised by JM, was held regarding whether different approaches had been adopted in other countries for similar purposes. The Working Group was not immediately aware of any such standards, though it was regarded an area to further consider.

5 Agreement of Next Steps

20. The original paper, as submitted to GCRP, is to be circulated to all members. Each member should familiarise themselves with the paper and be prepared to comment on the proposals within the paper at the next meeting.

Action: All to review the paper [draft consultation on Offshore BMU configuration as presented to the GCRP in September 2010](#)

21. Clarification of Scope, within the Terms of Reference, for next Working Group meeting.
22. Consider whether there are approaches applied in other countries which could be considered.
23. Completion of individual actions identified.

6 Any Other Business

7 Next Meeting

Logistics

24. Next meeting is due to take place on Tuesday 18th October; starting at 11am. The meeting is to be held at either Warwick or Wokingham dependant on room availability - to be confirmed.
25. The following meeting was also scheduled to take place on the 23rd November.
26. All attendees agreed availability on the above dates.

General Actions to be Completed during Next Meeting

27. Set completion date for Working Group and the schedule for production of a draft report.