

Summary of Meeting and Actions

Meeting Name	Rated MW Working Group
Meeting No.	2
Date of Meeting	Friday, 28 th September 2007
Time	10:00am – 2:00pm
Venue	D3-1, National Grid House, Warwick

This note outlines the key action points from the second meeting of the Rated MW Working Group.

1) Apologies for Absence

Apologies were received from John Morris (British Energy) and David Scott (EDF Energy).

2) Minutes from Previous Meeting

The draft minutes of the Grid Code Rated MW Working Group meeting held on 19th June 2007 were APPROVED, subject to minor amendments and will be accessible from the Grid Code Website.

The Working Group noted that a survey to the Generators community had not been issued as National Grid believed that the results would not yield any additional new information which would inform the debate. The Working Group noted that the issue of Generating Units exceeding their Rated MW may be not limited to a particular type of Generating Units e.g. pre-vesting. Given the continuous advancements in technology the Working Group accepted that all type of plants could have the potential to operate above their Rated MW.

3) Working Group Discussions

The Working Group discussed the results from the study and possible solutions, highlighting any associated implications.

Survey Results

National Grid presented the findings of analysis undertaken on GB Transmission System of the accumulative affects of pre-vesting plant operating at 5% and 10% above their Rated MW; the analysis focused on one boundary.

The analysis found that should all the pre-vesting Generators operate 5% above their Rated MW it would necessitate the installation of an additional 5 MSCs at a cost of £30m. Should the Generators operate 10% above their Rated MW it would necessitate an additional 20+ MSCs at a cost of £150m and thermal reinforcement work to accommodate the increase transfer rates due to the addition MWs available on the GB Transmission System (£230m). National Grid informed the Working Group that the additional investment identified by the study did not form part of current allowable revenue expenditure.

The study assumed that the increase in MW would result in other generating units being taken off. The Working Group acknowledged that by pulling back the non pre-vesting generation to keep the system in balance, as opposed to taking units off, the overall impact of those units operating above Rated MW on this boundary would be less. However, the Working Group thought is unlikely that there would be large numbers of units operating at part load. The Working Group noted that the increase output from some Generating Units may displace other plant which may not be able to operate above their Rated MW.

National Grid informed the Working Group that the study did not reflect any issues regarding stability which may require dynamic SVC's which are traditionally more expensive than normal MSCs.

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The Working Group noted that the introduction of the LCPD may result in the affected plant maximising their output over a specific period which may be in excess of their Rated MW.

The Working Group noted that the current market arrangements incentives Generators to maximise their MW output given the monetary value attached. The Working Group queried this given the importance of MVar to National Grid in managing, operating the system. The Working Group queried the appropriateness of the current commercial mechanism for MVar.

The Working Group noted that it would be beneficial to compare a Generating Unit's Rated MW against PNs submitted to ascertain whether Generating Units operated to their Rated MW.

Action: National Grid

Potential Outcomes

The Working Group discussed high level solutions and their associated issues:

- Option 1 – Reactive Power Provisions Across Full Operational Range
 - Generating Units to be capable of continuously supplying Reactive Power within a range equal to that between 0.85 lagging and 0.95 leading at Rated MW across the full operational range and not to operate outside this range under normal circumstances.

The Working Group noted that this solution would result in additional MW being produced and an associated reduction in MVar.

The Working Group noted that it may be possible for the Generating Unit to maintain 0.85 lagging at the new level of output however it may not be possible for the unit to maintain 0.95 leading due to the physical constraints of the Generating Unit.

The Working Group noted that the issue of taking off other generating units to compensate for the extra MW would still remain.

National Grid informed that Working Group that further analysis would have to be undertaken to study the effects on stability. To aid discussion and assist in the evaluation of the option, National Grid will re-run original study without the associated reduction in MVar.

Action: National Grid

- Option 2 – Generating Units exceeding Rated MW in a limited set of circumstances and Option 3 Generating Units exceeding Rated MW under specific circumstances

The Working Group noted that the main difference between options 2 and 3 was that under option 3, National Grid's decision would be based on a prescribed list of criteria i.e. the decision process would be more transparent.

The Working Group discussed all the proposed options, highlighting the potential issues both technical and commercial with them. The main issues discussed were:

- Access to additional MW
 - Members agreed that in times of system stress, having access to extra MW is useful).
- Added complexity in managing/planning the system
 - National Grid would have concerns of any solution would make the planning and managing of the GB Transmission System more complex in operational timescales.

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The Working Group identified other possible solutions:

- Option 4 – Reactive Market
Reduce the lagging range to 0.90; the shortfall in Mvar would be made up via the establishment of a unified reactive market.

The Working Group was informed that a previous Grid Code Working Group had investigated this issue. Group members are to review the findings/recommendations of the Working Group such that the group can make an informed decision regarding the validity of the solution.

Action: All

- Option 5 – Variant of Option 1
The solution outlined by option 1 but on a station or nodal basis.

The Working Group agreed to evaluate the additional options identified at the next meeting of the Working Group.

Rated MW Definition

The Working Group noted that the current definition of Rated MW refers to the rating plate of the Generating Unit. The Working Group noted that it may be beneficial to review the current definition such that it is suitably robust and provides sufficient clarity to Users. The Working Group acknowledged that it would not be appropriate to permit Generators to declare a low Rated MW whilst operating (continuously) at a higher level.

4) Next Steps

The following points will be discussed at the next Working Group meeting:

- National Grid to re-run study without the reduction of MVAR
- Transitional Issues
- Discuss/evaluate other options identified

5) Next Meeting

The next Working Group meeting will be scheduled for November 2007 at National Grid House, Warwick. The exact time and date will be confirmed shortly.

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Appendix 1 – Working Group Attendance

Members Present:

Lilian Macleod	LM	Working Group Chairperson
John Addy	JA	National Grid
Andy Balkwill	AB	National Grid
Neil Carter	NC	National Grid
Mark Perry	MP	National Grid
Claire Maxim	CM	E.ON UK
Bridget Morgan	BM	Ofgem
Andrew Morgan	AM	RWE
John Norbury	JN	RWE

Apologies:

John Morris		British Energy
David Scott		EDF Energy