Joint Grid Code and Distribution Code Review Panels Working Group

Implementation of Technical Requirements for Licence Exempt Embedded Medium Power Stations

Notes of Second Meeting held on 14 October 2003 at NGT House, Warwick

Present

Andy Balkwill	National Grid (Chair)
Sue Newbould	National Grid (Technical Secretary)
Mike Kay	United Utilities
Patrick Hynes	National Grid
Claire Maxim	Powergen
John Norbury	Innogy
Guy Nicholson	Econnect
Nigel Turvey	Western Power
Chris Berry	SP PowerSystems
Charlie Zhang	EDF Energy plc
Bridget Morgan	Ofgem (observer) (part time)

Apologies

James Glennie	BWEA

Notes and Actions

Notes of Meeting held on 23 September 2003

1. For clarification, JN emphasised that the deliverables under CUSC 6.5.1 (CAP002) are not within the terms of reference of this Working Group. The proposed amendment to CUSC 6.5.1 was intended to simplify the interface between all parties and to enable NGC to assess whether an embedded generator had an impact on the NGC Transmission System whilst this Working Group's remit is to identify how a category of power station ties in with technical requirements.

2. As Medium Power Stations are entitled to apply for licence exemption, JN suggested an additional option, of doing nothing should be included (the opposite of Option 6).

3. Minute 15 was clarified such that future developments should be kept in mind when exploring options.

4. The words "pros and cons" in Minute 13 are to be replaced with "issues" because as AB pointed out, one person's pro could be another person's con.

5. Minute 8 to be amended in accordance with CZ's comments, to include the words in italics: "NGC explained that it is concerned over the impact of potentially large amounts of embedded generation that has no obligation*, unless those embedded generators want to be party to the BSC,* to meet what it regards as minimum technical requirements."

6. With regards to Minute 7, CB felt some sort of contractual mechanism was required to enable NGC to get data on unlicensed embedded generation in a timely fashion so as to be able to undertake studies.

Additional options

7. In accordance with 2 above, it was agreed to include a new Option 9 of doing nothing. The Medium Power Station is entitled to apply for licence exemption. No change to existing arrangements and National Grid purchases additional reserve and response services as necessary.

Ofgem's position

8. BM joined the meeting at this point to discuss the options.

BM outlined the concern of both Ofgem and the DTI regarding licence exempt generators and the interim solution. Their key concern is transparency of arrangements and governance. Ofgem is concerned that the current need for a bilateral agreement triggers an automatic need for NGC to apply for a derogation. This is because National Grid has to enforce the Grid Code although it has no mechanism to enforce it on licence exempt generators. National Grid therefore has to submit an application for derogation against parts of the Grid Code it cannot enforce. BM said National Grid should be looking at the existing Grid Code with the view of determining whether it is fit for purpose. JN suggested that the technical requirements are made the same for all Medium Power Stations (licensed and unlicensed). BM advised that a Guidance Note on the derogation process is to be issued shortly and a link to the website will be provided.

Action: BM

Options and change to documentation

9. At GN's suggestion, the Working Group considered what documentation requires changing for each of the options and a summary of the debate is set out in the table below in Appendix 1.

Criteria

10. The WG then debated what criteria each of the options should be assessed against. The following criteria were selected:
    - No need for derogations
    - Transparency
    - Compliance with Licences/Statutes/Laws
    - Obligations consistent with party's normal duties/activities
    - Practicality/simplicity/efficiency
    - Ability to enforce
    - Governance route
    - Resilient/robust/endurable

Obvious Options not meeting criteria

11. The WG identified the obvious options that do not meet the above criteria listed in 10 above:
    - Options 4 and 7 - failed on the criteria that obligations should sit on the people who have direct interest, as did Option 5.
    - Option 6 - still requires derogation and would require Government to change exemption criteria (i.e. outside of Grid Code govenance).
    - Options 8 – failed on practicality but may provide solutions for some of the requirements in the longer term once markets have developed satisfactorily.
    - Option 3 - not transparent and is unacceptable to the DTI as an enduring solution. Complexity for generator. Begs the question as to how the generator is to be bound to the technical requirements. Not enforceable

as stated but could be used if the generator was bound to the technical requirements via the CUSC (Option 1), Grid Code (Option 2) or D Code (Option 5).

Options that appear to meet the criteria

12. The WG then considered Options 1 and 2. Under Option 1 the CUSC places an obligation on the DNO to ensure the generator complies. The Medium Power Station is not involved in the governance procedure so much although they do sit on the Grid Code Panel. Under Option 2, if the generator breaches the Grid Code it also breaches the CUSC. Option 1 has three sets of governance (G Code/D Code/CUSC) whilst Option 2 has two (G Code/D Code).

13. NT asked which takes precedence out of the CUSC or the Grid Code, in case of dispute, and whether this benefits Option 1 or 2 under governance. AB advised that the CUSC has specific licence obligations whilst the Grid Code is a Core Industry Document. AB's initial thought was that the CUSC took precedence.

14. The WG was coming to the view that Option 2 appeared to offer the best route and decided to examine Option 2 against the set of criteria in more detail. It considered the practically of who undertook the testing and monitoring and decided that although the DNO would need to be party to the process, they need not necessarily have to do it. National Grid should deal with the compliance issues.

15. NT said that if a generator cannot comply with the technical requirement then they would be breaching either the D Code or the DNO connection agreement. It was also noted that the generator could not seek a derogation from Ofgem from the need to comply with the technical requirements because they were unlicenced. Ultimately NGC may need to request the DNO to de-energise the generator, until the breach is resolved the DNO would need to be indemnified by National Grid. This could be an argument for putting the obligation in the CUSC (Option 1) because indemnification is covered in CUSC if National Grid requests the DNO not to energise the generator. However, the WG thought the Grid Code route (Option 2) was viable by having a consequential change in CUSC for indemnity if this was not already covered.

16. Option 2 was preferred on the basis of having one less governance but may need indemnity issues addressed in CUSC (consequential change). National Grid took an action to establish the link between the Grid Code and CUSC and the answer may direct the WG to Option 1 or 2.

Action: AB

Next steps

17. PH to identify the relevant Grid Code sections that apply to all Medium Power Stations.

Action: PH

18. PH to review the applicability of the Grid Code conditions to:
    - Directly Connected v Embedded Medium Power Stations;
    - Licenced v Licence Exempt Medium Power Stations.

Action: PH

19. National Grid to draft legal text changes to the Grid Code which place the obligation on the DNO to ensure that embedded LEMPS comply with relevant Grid Code provisions.

Action: PH

20. PH to identify the mechanism for making link to the DNOs and any consequential changes to CUSC potentially for indemnity.

Action: PH

21. National Grid to establish the route for testing and compliance (could be under a separate agreement or DNO to comply with OC5).

Action: PH

22. AB to produce a joint report to the GCRP on the WG's progress to date.

Action: AB

Issues

23. JN suggested that the applicability of obligations on Medium Power Stations such as their participation in the Balancing Mechanism is an important industry issue to be addressed. The Balancing Code places an obligation on generators to submit Physical Notification. Small Power Stations can opt out of the Balancing Code. JN queried whether Medium Power Stations should continue to submit Physical Notification and continue to participate in the Balancing Mechanism. National Grid took an action to consider this issue.

Action: PH

Next meeting

24. WG to meet on 14 November 2003 provided that the draft text is issued by 7th of November.
Post meeting note: the meeting is to be held on **Monday 1 December 2003** (NGT House, Warwick, B2.5 starting at 12:00).

Appendix 1

Option 1: CUSC>DNO>Generator

- Changes to D Code, Grid Code, CUSC.
- May need change to DNO's connection agreement with the licence exempt generator going forward. DNOs do not have standard connection agreements and so the DNO representatives thought the D Code route was more transparent.

Option 2: Grid Code >DNO>Generator

- Changes to D Code and Grid Code (D Code refers to Grid Code).
- Avoids unnecessary reference to CUSC (although note possible need for NGC to indemnify DNO if de-energisation of a non-compliant generator is required).

Option 3: NGC>Generator

- BM said this option is not favoured because of its lack of transparency.
- Something more durable needed in place of the interim bilateral to enforce the generator to have an agreement with NGC. The DNO's connection agreement would have to say that the generator needs an agreement with NGC. CUSC 6.5.1 covers this to a certain extent – CUSC would need changing such that would need to have an agreement with generator if within a certain category.
- BM was not convinced that this option would remove the need for NGC to apply for a derogation whereas Options 1 and 2 probably would. Would need to amend the bilateral every time there was a change or seek a derogation. If an agreement was not enforced the DTI would consider revoking the licence exemption.

Option 4: CUSC>Supplier>Generator and

Option 7: Grid Code >Supplier>Generator

- Post P100 there may not be a supplier.
- Contracts between suppliers and generators can change fairly frequently.

Option 5: Distribution Code>Generator

- If obligation sits in D Code then suggests DNO would be responsible for testing, compliance.
- No locus for NGC for an issue that is its responsibility under Licence. DNO could change without NGC's agreement, derogation problem.
- Change required to D Code.
- Would DNO have access to information (confidential to generator's manufacturer).
- CB felt it was impracticable from both a technical and resource point of view for the DNO to collect data, run studies, test.

Option 6: Review Licence Exemption Criteria

- Replaces the need for a bilateral because requirements would be set out in the Class Exemption / Grid Code. However, conditions could not be put in a class exemption because it is cross governance and therefore illegal.
- Therefore it is a non-starter to have a set of changing requirements. Once the Grid Code conditions are set they cannot be changed without DTI changing the class exemption and NGC would need derogation.
- There is a lack of enforcement.

Option 7 – see 4 above

Option 8: Market Solution

- Whoever had the market power had the advantage (could have monopoly in certain area).
- Difficulties of creating markets for different attributes. Regulation of market.
- Could encourage generator to site itself where it would not impact on the DNO.

New Option 9: Do nothing

- NGC continues to get derogations. (Ofgem does not like this and stops the DTI going to class exemption for <100MW).
- Review 1320MW maximum loss.
- Grid Code change to allow NGC to not apply Grid Code to licence exempt plant.

New Option 10: Commercial buyout

CZ suggested this option and post meeting has clarified the option as follows:
All developers seek two quotations from EPC contractors or turbine manufacturers: one (Price A) for installation compliant with all applicable new GC requirements; one (Price B) for installation not compliant with the new requirements. If any developer chooses to be not compliant with the new requirements, then he will:

a) pay cost at Price Delta (A-B) to a central fund for not being compliant, or

b) be paid at Price Delta (A-B) from the central fund for being compliant.

The choice of a or b is with the central fund administrator (which can be NGC) and not with the developer

Rational: 'buyout' is a reasonable option whenever only a fraction of players could not meet certain requirements but most can.

- Base set of technical criteria is still required.
- Difficulty in calculating lifetime system cost.
- Would work in a vertically integrated industry.