

Operational Intertripping Schemes**Paper by NGC****Introduction**

1. The need to review the provisions for the treatment of Intertripping Schemes (Scheme) has previously been raised by the industry in a number of fora. There have been discussions at previous GCRP meetings and a working group was set up. The working group made good progress in identifying area of the Grid Code that would benefit from some clarification, but was unable to come to a consensus on a number of issues. This working group has now ceased, although NGC agreed to take forward the clarification issues in the future along with developments that may come out of initiatives in other codes. NGC has carried out an internal review on the arrangements surrounding intertrips. Following this review NGC has proposed a CUSC amendment (CAP076), which proposes an enduring mechanism for the treatment of intertrips.
2. This paper seeks to update the GCRP on the current status of the above review and highlight any potential implications it may have for the Grid Code.

Background

3. At present compensation for operation of an Operational Intertrip is dealt with under the terms of the Grid Code (BC2.5.2.3) and BSC (Q 5.1.5), with the site specific details of the intertrip captured within Appendix F3 of the BCA of the generator. A Bid-Order Acceptance is issued following the operation of a Scheme at the prevailing price. This BOA continues until the end of that Balancing Mechanism window.
4. There is the potential that a large negative bid price is submitted when a Scheme is armed. In the event that this Scheme operates this would have the potential to significantly distort imbalance prices, and also result in considerable cash flows around the industry.
5. Furthermore, there is a lack of clarity regarding the categories of Schemes, and the consequent reason to install such Schemes at the time of connection.

NGC Review

6. NGC has been reviewing the way forward for dealing with intertrips. This has included reviewing the implications for the Grid Code, CUSC, BSC and any AA4 documents.
7. This review concluded that remuneration for Operational Intertrips would be best dealt with through the CUSC. The review sought to address the shortcomings of the current framework highlighted above by proposing to treat a Scheme as an Ancillary Service and covers categorisation, remuneration and obligations relating to a Scheme primarily within the CUSC.
8. In August NGC put forward a CUSC amendment proposal (CAP76) detailing a revised framework for dealing with intertrips. The CUSC Panel has decided this should be considered by a CUSC working group.

9. The main elements of the proposal are described below:

Proposal Overview

10. Intertrip categories will be defined in the CUSC. The categories proposed are as follows:

11. Category 1: Scheme arising from a Variation to Connection Design

12. Category 2: Scheme required to alleviate an overload on a circuit that connects the group containing the Generator to the rest of the System. The operation of the Scheme means any MW reduction from the Generator has exactly the same MW reduction on the circuits that connect the Generator to the rest of the System.

13. Category 3: Scheme installed as an alternative to reinforcement of a third party system, where the Scheme removes overloads on the third party system e.g. DNO system.

14. Category 4: Scheme installed at the request of NGC under circumstances when the Generator would be disconnected from the Transmission System and where the use of such schemes would be beneficial in order to facilitate the timely restoration of critical circuits.

15. Remuneration mechanisms:

16. For appropriate categories NGC would pay an administered annual fee to cover the general cost of the intertrip. This would be expected to cover costs such as training and insurance etc. Furthermore on trip, where NGC has instructed the scheme in service, the generator will receive a one off administered payment to cover certain costs of the intertrip firing.

17. Following operation of a Scheme the volume tripped off (for up to 24 hours post trip) would be included within the Applicable Balancing Services Volume Data (ABSVD) in order to limit exposure to imbalance prices.

18. After 24hrs, should NGC be unable to restore Transmission Capacity, the party with the affected Generating Unit(s) would receive an access rebate at a daily rate to remunerate the restriction on their access to the Transmission System (in accordance with the principles of CAP 48).

19. Note, as a Category 1 Scheme relates to circumstances arising as a condition of a Variation to Connection Design, which, in accordance with the Security and Quality of Supply Standard, must not result in additional costs to any other customer, it is not proposed that this category receive any remuneration.

20. Framework

21. The categories 1 - 4 would all be treated as Ancillary Services, with the definitions and generic terms for categories, including the terms for remuneration (described above), covered within the CUSC. The site specific details for the Schemes would be contained within Appendix F3 of the Bilateral Connection Agreement (BCA).

22. The majority of changes would be to the CUSC, principally in defining the intertrips and putting the compensation mechanism in place. Additionally changes would also be required to the BSC and AA4 Licence documents.

Likely Grid Code Impact

23. NGC expect the provisions in the Grid Code will require consequential changes as a result of the CUSC amendment or any alternate that may be proposed. Obviously, the consequential changes cannot be drafted until the CUSC amendment process has made some progress.
24. NGC will follow the development in the CUSC and proposed consequential changes to Grid Code. Due to the timescales involved this may need to be progressed through e-mail discussions with the GCRP. If significant changes are required, an additional GCRP meeting may be considered.
25. Based on the original amendment proposal, NGC would expect a number of consequential changes, but would also propose to include the changes for clarification, that have previously been identified through the GCRP. The main areas NGC are considering are noted below:
26. Clarification of notifications and Intertrip Scheme instructions:
- Remove references from Special Actions (BC1.7) and Operational Instructions and Notifications BC2.10 for notification and arming of Schemes.
 - Clarify OC2 in terms of requirements for notification of arming Schemes.
 - Expand Ancillary Service Instructions (BC2.8) to cover instructions to arm Schemes.
 - Clarification of post trip PN redeclarations and Transmission restrictions.
27. Changes due to new CUSC Payment mechanisms
- Removal of the existing remuneration mechanism (Bid-Offer acceptance).
 - Amendment of definition of Commercial Ancillary Services, to cover Intertrips and to refer to payment provisions set out in the CUSC Section 4.
28. Clarification to the Connection Conditions
- Incorporate that NGC may require to have installed and available for arming an Intertrip Scheme as part of the condition of connection in accordance with the terms specified in Appendix F3 of the BCA.
 - Clarify the requirement for the installation of intertrips where a Generator would be disconnected from the System following a fault, in order to enable the timely restoration of circuits following power System fault(s).

Recommendation

29. The Grid Code Review Panel is invited to:
- note the above proposal and work in progress with regard to CUSC changes within the CAP 76 working group
 - note that changes to the Grid Code in accordance with those outlined above may be raised in conjunction with the development of CAP76
 - agree that NGC should pursue the additional changes for clarification, previously identified in any modification discussions.