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O.F. :

## LAB TEST REPORT & ANALYSIS

# GPU's stability and power quality: Le Bourget

AC/Type	Model	MSN/Simu	FTES	FTP	Test Request Reference
Test reques	ted date	Availability	of tested device		Test period

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#### SUMMARY:

This document describes the tests to be performed in order to evaluate the performance of <u>AXA Twin Power</u> Ground Power Unit with A380 ground network under certain operational conditions. This tests request follows the Issues encountered at Le Bourget air show, where some unstabilities of static GPU has been observed, especially following EMP start-up, leading to high disturbances of the AC network and the total loss of the DC network. (all TRU's tripped)

Those tests are to be run first on Le Bourget <u>AXA Twin Power</u> GPU's to better understand the technical issue. Following analysis with BNE of the other potential suppliers of static GPU's for A380, some other GPU's will have to be tested.

#### Conclusion:

The tests have permitted to reproduce the issues encountered at le Bourget air show. Tests have shown, that powering-up successively the 4 EMP's, lead to trip either Ground Power Unit or Ground Generator Power Control Linit

To solve the problem, another soft has been implemented on the GPU. The following tests show the behaviour of the <u>AXA Twin Power</u> Diesel Ground power Unit with the new software implementation servicing the A380 ground network. Indeed, a last test shows the behaviour of the <u>AXA Twin Power</u> Static Ground power Unit servicing the <u>A380 ground network</u>.

These tests confirm that under the tests conditions specified, the AXA Twin Power Ground Power Unit is capable to provide electrical supply to the A380 ground network.



KEY WORDS	: GENERATION ALTERNAT. / CONV	V. STATIQUE			
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# Integration Test Centre

'These tests confirm that under the test conditions specified, the AXA Twin Power Ground Power Unit is capable to provide electrical supply to the A380 ground network'



