



21st August 2002

SPIRE-RAL-COM-001352

To: Horst Faas

From: John Delderfield

cc:W. R uhe, G. Crone, Th. Pa svogel, G.Lund, B.Collaudin, Eric Sawyer, Bruce Swinyard, Sam Heys

SPIRE ‘EXTERNAL’ ELECTRICAL ISOLATION

Thank you Horst for your HP-ASED-FX-0494/02 pointing out the IID-A words on this subject. Following the route you suggest that we should clarify and confirm the actual baseline, please find the below table. Any details therein that differ from or add to the IID-A should be spelt out in the Spire IID-B.

Level	I/F Location	Isolation	Description/Comment
0	3 straps just above HOB	Higher up SPIRE instr.	Not Spire/Herschel I/F
1	On SOB	At Spire/HERSCHEL I/F*	ISO-like to end of strap linking to elevated boil-off pipe.
2	On HOB	At Spire/HERSCHEL I/F	Part of Spire feet
3	2 straps just above HOB	At Spire/HERSCHEL I/F*	ISO-like to outer ends of FET frames
Cryoharness	From Spire--CVV conns.	Distributed where clamped	Consistent with need to run harness across HOB on small ‘viaduct’ to keep down thermal losses.
SVM units	At their bases and along warm harness.	Joined	Helped by also bonding

*Eric Sawyer has agreed that to keep the peace Spire will source insulators at these points, provided they are little bits of sapphire..he won’t pay for diamond!!! However design still needs to be agreed.

Cheers

John