Date: June 4, 02
To: T10 Technical Committee
From: Jim Coomes (jim.comes@seagate.com)
Subject: Proposal to remove Far-end retimed loopback

The Far-end retimed loopback function in SAS perceived to allow lab verification of signal quality. This function in parallel SCSI and Fibre Channel is satisfied with use of the SCSI Read/Write buffer commands.

In an operational environment, testing links is not practical. An example problem is in a multi-initiator system, when one initiator puts a link into test mode, loopback, other initiators may think the link has failed and start error recovery, e.g., OOB. Dual port is the solution to accessing devices with marginal or failed links.

The Far-end loopback function requires targets to support SMP and is the only SMP function required for targets to support. Removing this function would simplify target by allowing targets to reject Open SMP with protocol not supported.

Furthermore, the current definition of Far-end loopback is not sufficient to implement the function. There are questions of how fast the loopback is established and exited. The response time is critical to determine if the function is enabled by hardware or firmware.