Date: 4/20/93

Subject: Conflict between CORRECT and DCR bits

The March working group addressed the conflict between the READ LONG Command (8.2.9) and the READ-WRITE Error Recovery Page (Table 168). The conflict had been pointed out at the February plenary of X3T9.2. Byte 1, Bit 1, CORRCT of the READ LONG Command requires that the data be corrected by ECC. Byte 2, Bit 0 DCR of the READ-WRITE Error Recovery Page requires that ECC shall not be used. The impact of having these two requirements simultaneously true is not presently addressed.

The consensus of the March working group was to indicate that under these circumstances the READ LONG Command should be rejected with an indication of an illegal parameter. Assuming the initiator wanted to complete an ECC test operation, the recovery for the initiator would be to issue a Mode Select with the DCR bit false.

The attachment provides an appropriate revision for SCSI-3 implementing the consensus of the working group. Bits and fields which have not changed from SCSI-2, are not included in the text description of the attachment but will be included in the SCSI-3 publication. Changes from the SCSI-2 base are underlined.

The change from "causes" to "requests that" are editorial and optional for the technical editor.

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SCSI-3 Read Long

A corrected (CORRCT) bit of zero requests that ~~causes~~ a logical block to be read without any correction made by the target. A CORRCT bit of one requests that ~~causes~~ the data ~~to~~ be corrected by ECC before being transferred to the initiator. If the DCR bit of the READ-WRITE Error Recovery Page is equal to one and the CORRCT bit equals one the Read Long Command shall be terminated with CHECK CONDITION status and the sense key shall be set to ILLEGAL REQUEST with an additional sense code of INVALID FIELD IN CDB.