

To: X3T10 Committee (SCSI)

From: George Penokie (IBM)

Subject: Clarification of Sleep Mode

## 1 Changes to SBC Start/Stop Unit command

In the description of sleep mode in the start/stop unit command of the SBC draft it appears as if a device can be changed from sleep mode to another mode on receipt of another start/stop command. Additionally, it appears like a command issued to a target in sleep mode should return a check condition status. However, elsewhere in the description of sleep mode it sounds as if once a target is in sleep mode, only a bus reset can bring it out with no indication as to what to do if a command is issued.

The current description of sleep mode could lead to an improper implementation. I propose the following change be made to the SBC draft to correct this problem:

In section 5.1.4 change:

"If the START/STOP UNIT command is issued with the Power Conditions field set to 1, 2, 3, or 5 the logical unit shall:"

to:

"If the START/STOP UNIT command is issued with the Power Conditions field set to 1, 2, or 3 the device server shall:"

and add the following after the first abc list:

"If the START/STOP UNIT command is issued with the Power Conditions field set to 5 the device server shall:

- a) suspend any Power Condition timers that are active on receipt of the START/STOP UNIT command until a WAKEUP task management function is received by the device server.
- b) not respond to a task requests until a WAKEUP task management function is received by the device server.

On receipt of a WAKEUP task management function any previously active power conditions timers shall be restored to those values indicated by the saved power condition mode page parameters."

## 2 Information to be added to the SBC model

The following should be added into the power conditions model in SBC.

Figure 1 shows the flow control between the different power conditions in a device that is setup to adjust itself automatically to the power condition that allows any command to execute.