Another way to ensure that two copies of the ML2 data exist is to use hierarchical storage management (HSM) duplexing or the new Synchronous copy mode option support in the TS7700. Both ways create two separate copies of the ML2 data before HSM deletes it.

Ideally, with a multi-cluster grid, you want one copy of the data in one cluster and the second copy in another cluster to avoid loss of data if one of the clusters experiences a disaster. You can use the Copy Consistency Points to ensure that each copy of the duplexed data is sent to a separate cluster.

## RECYCLE

The DFSMShsm RECYCLE function reduces the number of logical volumes inside the TS7700, but when started, it can cause bottlenecks in the TS7700T recall process. If you have a TS7700T with four physical drives, use a maximum of two concurrent DFSMShsm RECYCLE tasks. If you have a TS7700T with six physical drives, use no more than five concurrent DFSMShsm RECYCLE tasks.

Select the RECYCLEPERCENT and consider the following points:

- ► You free logical volumes on a stacked volume with hundreds of other logical volumes.
- ► The space that is occupied by the logical volume is freed up only if and when the logical volume is used (overwritten) again, unless you are using Expired Volume Management.
- ► To RECYCLE, the TS7700 must load the input volumes into the TVC.

Use a RECYCLEPERCENT value that depends on the logical volume size, for example:

- ► 5 for 1000 MiB, 2000 MiB, 4000 MiB, or 6000 MiB volumes
- ▶ 10 for 400 MiB or 800 MiB volumes

You can use the following commands to limit which volumes can be selected for DFSMShsm RECYCLE processing. For example, you might want to limit RECYCLE to only your old technology, and exclude the newer tape technology from RECYCLE until the conversion is complete:

- ► RECYCLE SELECT (INCLUDE(RANGE(nnnn:mmmmm)))
- ► RECYCLE SELECT (EXCLUDE(RANGE(nnnn:mmmmm)))

You can also use the SETSYS RECYCLEOUTPUT to determine which tape unit to use for the RECYCLE output tapes. You can use your ACS routines to route the RECYCLEOUTPUT unit to the wanted library by using the &UNIT variable.

For more information about implementing DFSMShsm, see *IBM z/OS DFSMShsm Primer*, SG24-5272.

## 8.6 DFSMSrmm and other tape management systems

No changes are required to any TMS to support basic TS7700. You review only the retention and movement criteria for the data in the TS7700. You must check your daily tape management process to delete any step that relates to EJECT activities.

DFSMSrmm accepts logical volume capacity from an open close end-of volume (OCE) module. DFSMSrmm can now always list the actual reported capacity from TS7700.