MACHINE M_Part_Trans
SEES C_Part_Proc_Trans
VARIABLES
     partition_mode
INVARIANTS
     inv_part_mode: $partition\_mode \in PARTITIONS \rightarrow PARTITION\_MODES$
EVENTS
Initialisation
     begin
          act001: $partition\_mode := PARTITIONS \times \{PM\_COLD\_START\}$
     end
Event partition_mode_transition ⟨ordinary⟩ $\widehat{=}$
     any
          part
          newm
     where
          grd001: $part \in PARTITIONS$
          grd002: $newm \in PARTITION\_MODES$
          grd003: $partition\_mode(part) = PM\_IDLE \Rightarrow newm = PM\_WARM\_START \lor newm = PM\_COLD\_START$

          grd004: $partition\_mode(part) = PM\_COLD\_START \Rightarrow newm = PM\_IDLE \lor newm = PM\_COLD\_START \lor newm = PM\_NORMAL$
          grd005: $partition\_mode(part) = PM\_WARM\_START \Rightarrow newm = PM\_IDLE \lor newm = PM\_COLD\_START \lor newm = PM\_WARM\_START \lor newm = PM\_NORMAL$
          grd006: $partition\_mode(part) = PM\_NORMAL \Rightarrow newm = PM\_IDLE \lor newm = PM\_COLD\_START \lor newm = PM\_WARM\_START$
     then
          act001: $partition\_mode(part) := newm$
     end
END