

Machine Shared_Object1Impl

VARIABLES

ctm
shss
cttm

INVARIANTS

cttm $\in \mathbb{Z}$
ctm $\in \mathbb{Z}$
shss $\in \text{BOOL}$

EVENTS

INITIALISATION \triangleq

```
BEGIN
  THEN
    cttm := 0
    ctm := 0
    shss := FALSE
END
```

SOGGet_Target_Temperature1 \triangleq

```
ProcedureSynch
BEGIN ANY
  formalOut tm
  WHEN
    tm  $\in \mathbb{Z}$ 
    tm = cttm
  THEN
    skip
END
```

SOSet_Target_Temperature \triangleq

```
ProcedureSynch
BEGIN ANY
  formalIn tm
  WHEN
    tm  $\in \mathbb{Z}$ 
  THEN
    cttm = tm
END
```

SOGGet_Target_Temperature2 \triangleq

```
ProcedureSynch
BEGIN ANY
  formalOut tm
  WHEN
    tm  $\in \mathbb{Z}$ 
    tm = cttm
  THEN
    skip
END
```

SOSet_Heat_Source_State \triangleq

```
ProcedureSynch
BEGIN ANY
  formalIn state
  WHEN
    state  $\in \text{BOOL}$ 
  THEN
    shss := state
END
```

SOGGet_Stored_HeatSource \triangleq

```
ProcedureSynch
BEGIN ANY
  formalOut state
  WHEN
```

```
state ∈ BOOL
state = shss
THEN
    skip
END
```