_____ MODULE traffic_light —

VARIABLE color

 $AcceptableColor \,\, \stackrel{\Delta}{=} \,\, color \in \{\,\text{``red''}\,,\,\,\text{``green''}\,,\,\,\text{``yellow''}\,\}$

 $Init \stackrel{\triangle}{=} color = "red"$

 $TurnGreen \triangleq$

 $\land \ color = \text{``red''}$

 $\land \mathit{color'} = "\mathsf{green"}"$

 $Turn Yellow \triangleq$

 $\land \ color = \text{``green''}$

 $\land color' = "yellow"$

 $TurnRed \stackrel{\triangle}{=}$

 $\land \ color = \text{``yellow''} \\ \land \ color' = \text{``red''}$

 $Next \triangleq$

 $\wedge \ TurnGreen$

 $\land Turn Yellow$

 $\land \ \mathit{TurnRed}$