The variable initialization control, S2M, specifies the time at which the model transitions from source to a normal machine with all of its electrical equations ‘active’. To ensure that the machine is operating as a pure source, the ‘variable initialization control’, S2M, has to be set to ‘0’ until the required steady-state condition is attained.

After the initial transients have settled, the machine mode is activated by switching S2M from 0 to 1. At this instant, the rotor will be spinning at a constant speed as the machine is still in the ‘locked rotor’ state. The governors and turbines may be initialized at the time instant when the rotor is unlocked, i.e. when the signal LRR is switched to 1. Once this happens, the mechanical dynamics is active.

S2M and LRR are variables in Synchronous machine, Variable Initialization Data" submenu. They enabling dynamics of machine, fill them with values (0 or 1) for example with Time switch. We can erase them and fill this columns with values 0 or 1 (0=Source mode and Lock rotor Mode and 1= machine transition and Normal mode).