delay_onestep.xbe

Attributes

```
xbe name=delay_onestep evaluate=yes save_history=yes allow_ssw=no
#
# delay by one time step
#
Jacobian: variable
input_vars: x
output_vars: y
aux_vars:
iparms:
sparms:
rparms: x_last=0.0
stparms:
igparms:
outparms: x y
```

Description

delay_onestep.xbe is used to delay a signal by one simulation time step. It is meant to be used only when the backward_euler_const or trz_const option is selected for the integration method. It is useful in making convergence of Newton-Raphson iterations easier in closed-loop systems.

Note that its functionality is different than delay_discrete.xbe which delays the input signal by a specified interval, generally made up of several simulation time steps.