

## [CONTROLS]

### Purpose:

Defines simple controls that modify links based on a single condition.

### Format:

One line for each control which can be of the form:

```
LINK linkID status IF NODE nodeID ABOVE/BELOW value
```

```
LINK linkID status AT TIME time
```

```
LINK linkID status AT CLOCKTIME clocktime AM/PM
```

where:

```
linkID      = a link ID label
status      = OPEN or CLOSED, a pump speed setting, or a control
              valve setting
nodeID      = a node ID label
value       = a pressure for a junction or a water level for a tank
time        = a time since the start of the simulation in decimal
              hours or in hours:minutes format
clocktime   = a 24-hour clock time (hours:minutes)
```

### Remarks:

- a. Simple controls are used to change link status or settings based on tank water level, junction pressure, time into the simulation or time of day.
- b. See the notes for the [STATUS] section for conventions used in specifying link status and setting, particularly for control valves.

### Examples:

```
[CONTROLS]
;Close Link 12 if the level in Tank 23 exceeds 20 ft.
LINK 12 CLOSED IF NODE 23 ABOVE 20

;Open Link 12 if pressure at Node 130 is under 30 psi
LINK 12 OPEN IF NODE 130 BELOW 30

;Pump PUMP02's speed is set to 1.5 at 16 hours into
;the simulation
LINK PUMP02 1.5 AT TIME 16

;Link 12 is closed at 10 am and opened at 8 pm
;throughout the simulation
LINK 12 CLOSED AT CLOCKTIME 10 AM
LINK 12 OPEN AT CLOCKTIME 8 PM
```