

## Criterion for the detection of the special case

- a,  
 Connection of two standard nodes of different type via conjugated power variable "outputs" each (Ex resp. Fx and x≠0)
- b,  
 Connection of a standard node ("output" Ex resp. Fx and x≠0) and a transformed node of same "output" power variable type but need of a negative conjugated power variable

Please compare the concerning node equations in documentation "Prepared appearance forms of node blocks in Simulink Bondgraphs".



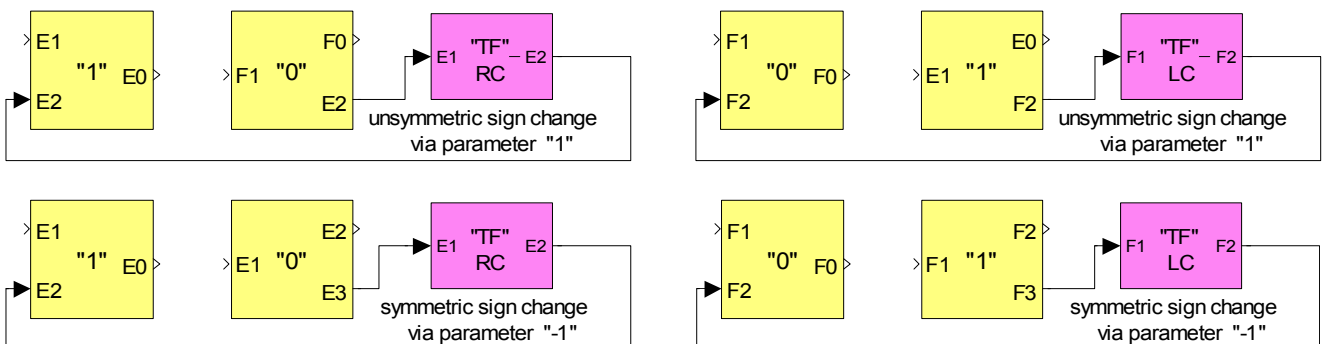
### **Case a:** two standard appearances

Both ports in question realize negative signs regarding the back transmitted invisible power variable



### **Case b:** one node standard appearance / second node transformed

The port of the left node block in question realizes a negative sign regarding the back transmitted invisible power variable; the port of the right node block in question **shall** realize a negative sign regarding the back transmitted invisible power variable – as a demand of the application.



### **Solutions regarding Simulink Bond Graph library version 2.0**

**(see also example BandStopFilter in the circuit collection)**

Please note: future versions will avoid the necessity of an auxiliary TF element.

**Handling of a special case of the node block connections – BG V.2.0**