How can I deactivae easYgens generator voltage and frequency monitoring by a defined time?

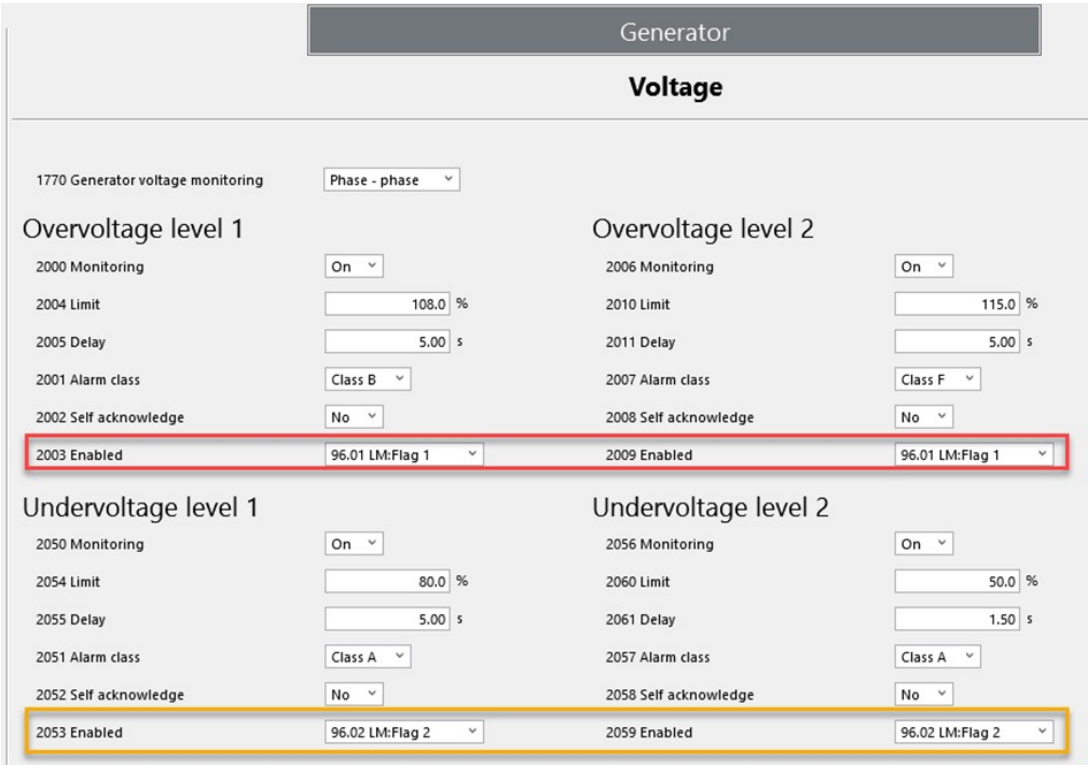
Clemens - 2024-10-10 - application

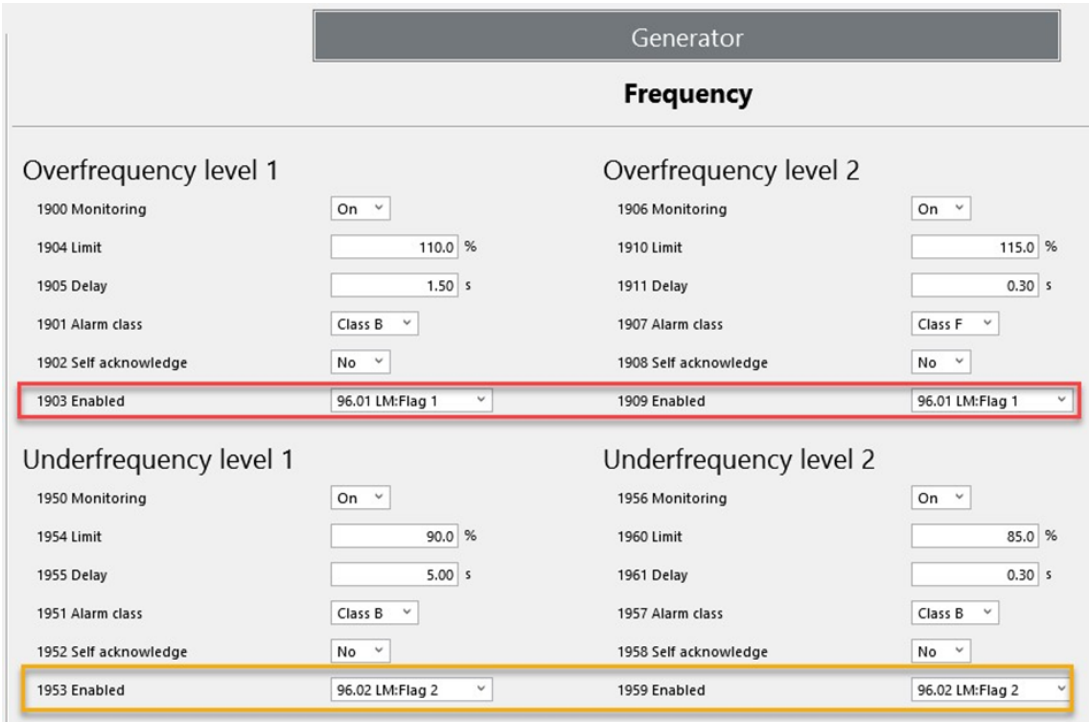
Discrete Input to deactivate Gen. Voltage and Frequency for certain time [in seconds]

Example solution as follows…

Prepare Volt-/Freq. Monitoring parameters

(instead of „Always“ or „LM:Rel.Eng.Monitoring“ enabled, here put Flags accordingly)




Generator
Frequency
Overfrequency level 1
1900 Monitoring
On
1904 Limit
110.0
%
1905 Delay
1.50
s
1901 Alarm class
Class B
1902 Self acknowledge
No
1903 Enabled
96.01 LM:Flag 1
Overfrequency level 2
1906 Monitoring
On
1910 Limit
115.0
%
1911 Delay
0.30
s
1907 Alarm class
Class F
1908 Self acknowledge
No
1909 Enabled
96.01 LM:Flag 1
Underfrequency level 1
1950 Monitoring
On
1954 Limit
90.0
%
1955 Delay
5.00
s
1951 Alarm class
Class B
1952 Self acknowledge
No
1953 Enabled
96.02 LM:Flag 2
Underfrequency level 2
1956 Monitoring
On
1960 Limit
85.0
%
1961 Delay
0.30
s
1957 Alarm class
Class B
1958 Self acknowledge
No
1959 Enabled
96.02 LM:Flag 2

Prepare an internal AM to generate a ONE SHOT pulse

L1 = Discrete input that triggers the pulse

C1 = time in seconds, the pulse shall be ON

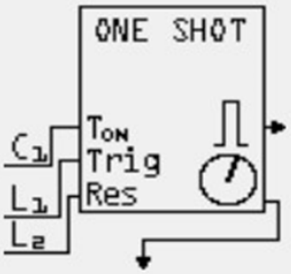
This pulse defines the time how long the V/f-monitoring shall deactivate in the end.

AM Internal value 3

9649 Description: Input triggering Alarm OFF

9648 AM Internal value 3

A1	10.01 ZERO	
A2	10.01 ZERO	
C1	60	
L1	09.09 Discrete input 9	
L2	02.01 LM FALSE	
Type	One Shot	



Apply Cancel

Output

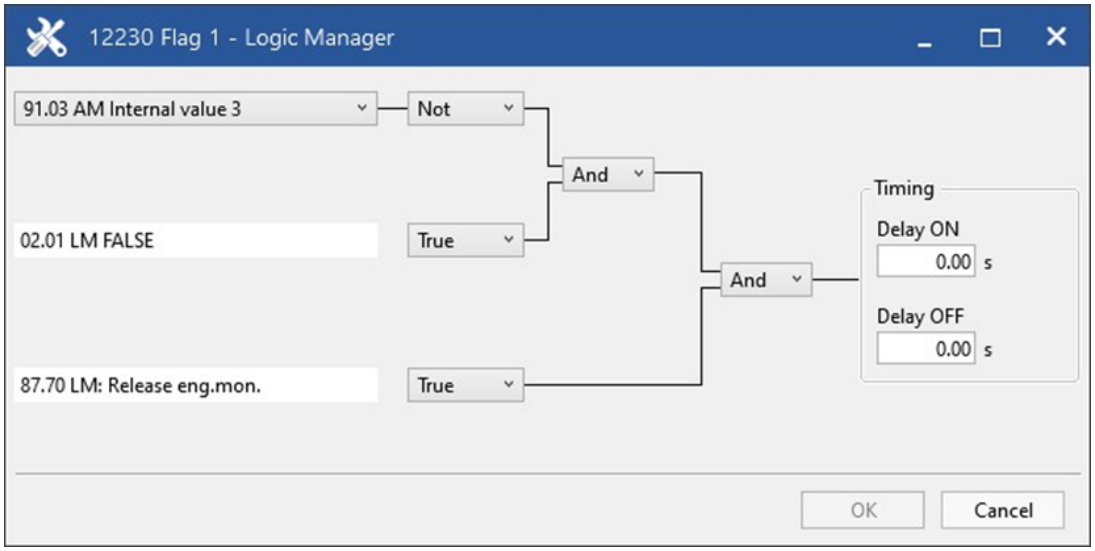
9651 91.03 AM Internal value 3

9650 91.03 AM Internal value 3 0.00

Prepare the Flags #1 and #2

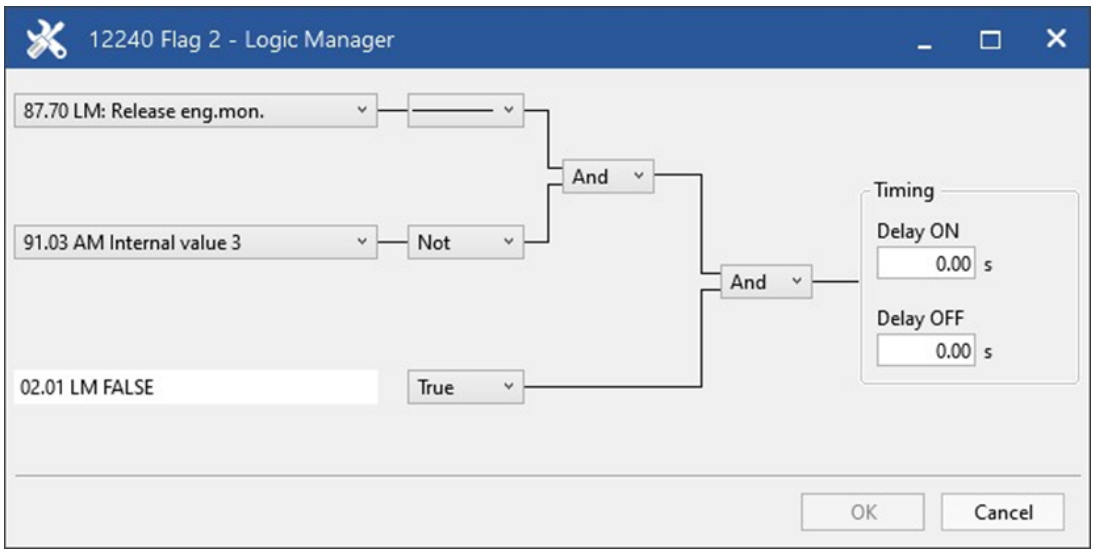
Flag 1

(TRUE as long as logical state of AM#3 is FALSE. i.e. the linked monitors stay normally always active)



Flag 2

(TRUE as long as LM:Rel.Engine monitor is released AND logical state of AM#3 is FALSE. i.e. to keep the default dependency of Engine Monitor release, plus the AM#3 state. So, the linked monitors stay normally always active after engine monitor delay time)



Now, if DI#9 latches the one shot pulse in AM#3, the Volt. / Freq. Monitoring gets inactive for the configured time in C1 in AM#3