sw_en_out during power up

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sw_en_out

sw_en_out at the DHP enables the serial control lines to the switchers

- should only be enabled for the DHP which is connected to the switchers
- should not be enabled before the switcher sequence is uploaded
  (with not configured DHP memory sw-dvdd goes into current limit)
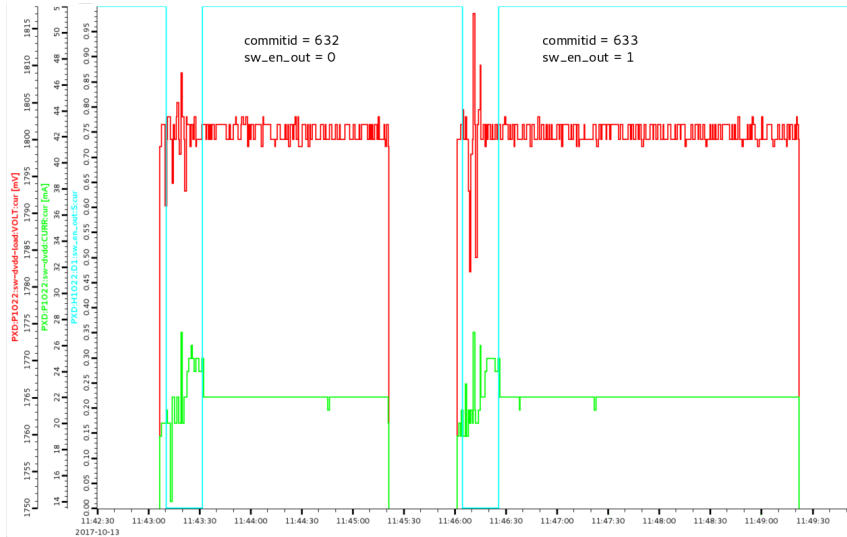
ways to ensure this

- set sw_en_out $= 0$ in the commit
  (not the case in the templates)
- ignore the PV from the commit in the DHH Sequence
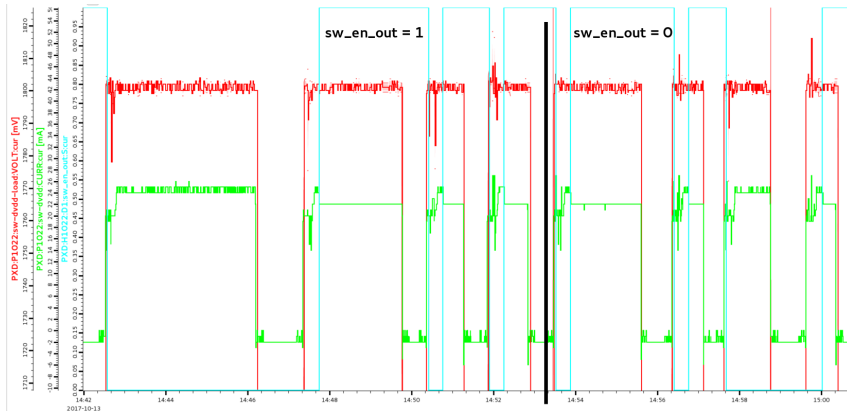 (implemented from epics-ioc-dhh-sequence-0.2.4 on)
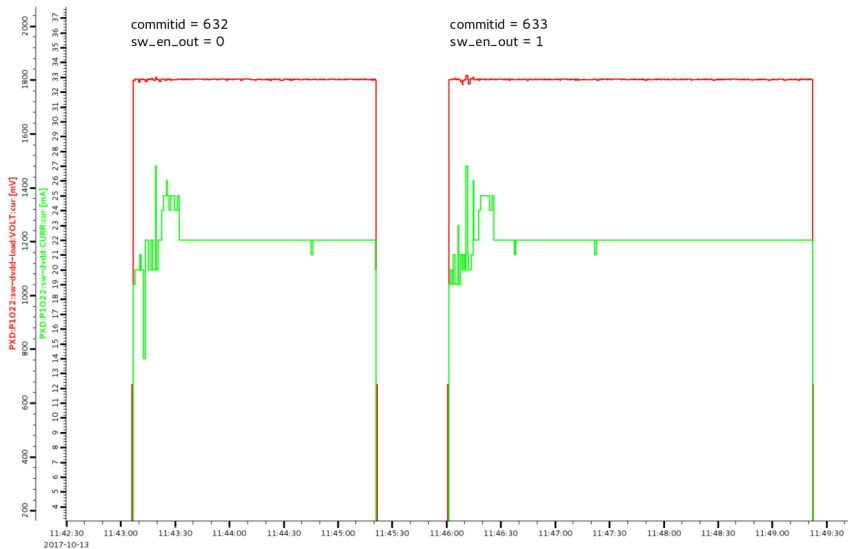
sw-dvdd current is not in the current limit for both cases.

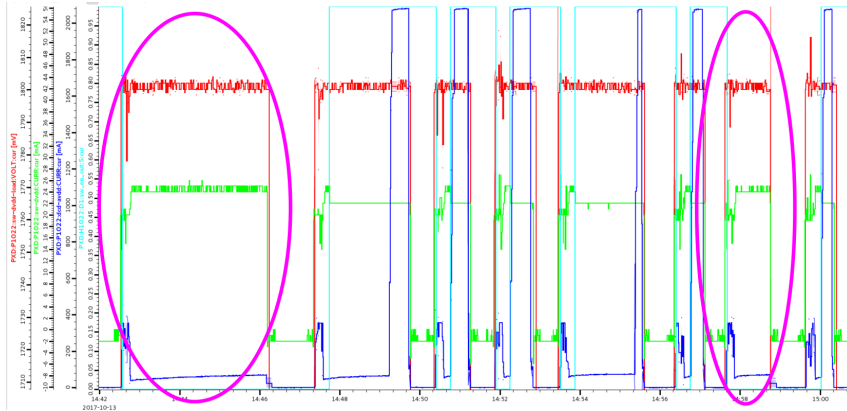A zoom-in shows a bit higher fluctuation where sw_en_out = 1.

For more statistics the power-up was executed several times.
There is no difference in current consumption or voltage fluctuation.
sw-dvdd stays in $\pm\,20\,\text{mV}$.
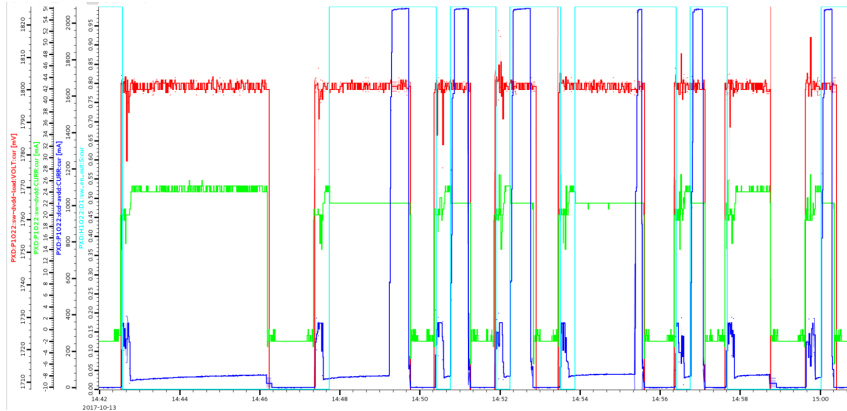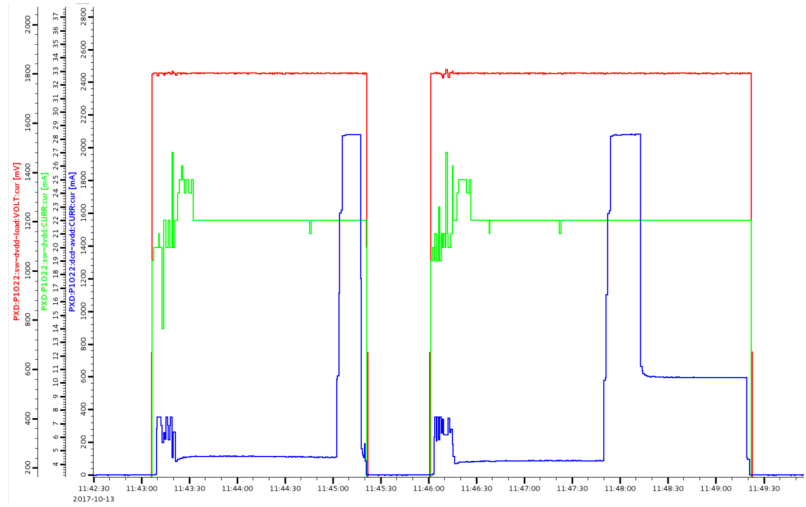
Two times the power up got stuck.
The dcd-avdd current shows that the analog parts of the DCDs were not enabled.
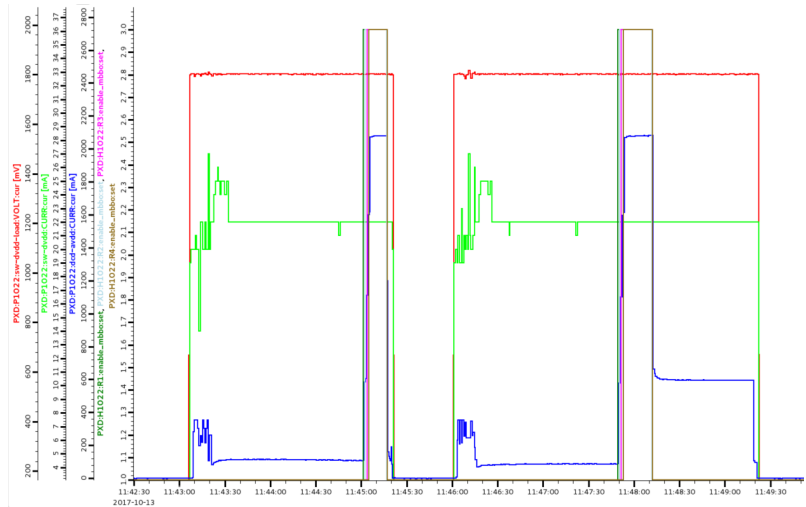
sw_en_out was not set back to 1.
When this occurs again, we have to see were exactly the power up sequence stops.

The power down sequence got stuck after trying to disable the analog part of the DCDs. Only a second, manually executed "Write Global Shift Register" set the DCD1 off as well.

The analog parts of the DCDs are enabled with a short pause in between.
The disabling is done for all at once.