

PRECYCLE IN 2015

In order to gain time the precycle (and accordingly the rampdown) in 2015 has been changed with respect to the way it was performed during Run1. This modification makes the whole mechanism quite more complex.

In 2015 we consider 2 types of circuits:

CIRCUIT TYPE	CIRCUITS
Rampdown by FUNCTION	All circuits not contained in the other category
Rampdown by OPENLOOP/STANDBY	<ul style="list-style-type: none"> • ITs • RQD/F • All IPQs

The settings are contained in the BPs:

- **PRECYCLE-6.5TeV-STANDARD_V1** for the “Rampdown by FUNCTION” power converters (see example in appendix A)
- **PRECYCLE-6.5TeV-RAMP-UP-ONLY-V1** for the “Rampdown by OPENLOOP/STANDBY” power converters (see example in appendix B)

At the end of their function, the circuits with RAMP-UP-ONLY settings will be sent (by the sequence) to:

- OPENLOOP for:
 - IPQs (to 100 A)
 - RQD/F (to 350 A)
- STANDBY for:
 - ITs

In case of trip of a single circuit the strategy to apply is

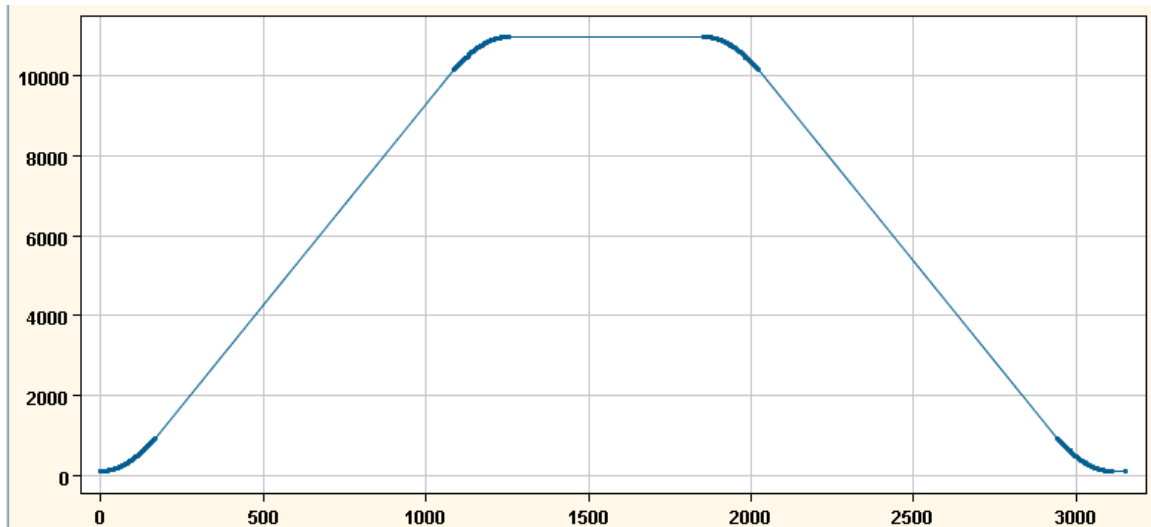
Circuit trip	Action
RB	Precycle all machine
RQD/F IPQs RQX	Precycle the single magnet
600 A and correctors	No need for precycle
Warm magnets	Precycle the single magnet

To precycle the Rampdown by OPENLOOP/STANDBY circuits you can manually load the settings from the BP "PRECYCLE-6.5TeV-RAMP-UP-ONLY-V1" then send the relative command via the equip state:

- STANDBY for IT
- OPENLOOP (this command is now available and will ARM the PC) for IPQs and RQD/F

APPENDIX A

Example of Rampdown by FUNCTION settings



APPENDIX B

Example of Rampdown by OPENLOOP/STANDBY settings

