PIP-II IT HWR - Bug #25159

Beam Synchronization

11/02/2020 03:28 PM - Shrividhyaa Sankar Raman

Status:	Resolved		**Start date:**	11/02/2020
Priority:	Normal		**Due date:**	
Assignee:			**% Done:**	100%
Category:			**Estimated time:**	0.00 hour
Target version:			**Spent time:**	44.00 hours

Description

- The Beam Loading Compensation ON/OFF does not have any effect until a Beam Compensation parameter is changed.
- Beam Loading Compensation Waveform is overwritten by the FF fill time until the start of flat top.
- CHANGE_cb_Update_SP_FF for BC Enable made in the spreadsheet.
- The BC Enable parameter on the spreadsheet now has CHANGE_cb_Update_SP_FF for change callback. This will create a problem when in CW mode which has a separate use of the same parameter.
- Therefore a new callback function has been written, tailor made for BC Enable called CHANGE_cb_BCEn for each cavity.
- This got rid of the mentioned problem.

History

#1 - 11/02/2020 03:29 PM - Shrividhyaa Sankar Raman

- *% Done changed from 0 to 50*

#2 - 01/25/2021 11:50 AM - Shrividhyaa Sankar Raman

- *% Done changed from 50 to 100*

- *Status changed from New to Resolved*

- *File Beam Sync.docx added*

- The beam sync feature was completely removed and the features except the dt changes were re-coded.
- The differences between the 2 versions were documented and closely analyzed (see attachment).
- The dt block was reprogrammed.
- The changes now seemed to have taken effect. The code was tested and successfully installed at CMTF.

Files

Beam Sync.docx		454 KB	01/25/2021	Shrividhyaa Sankar Raman