

AGS/Booster Issues

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Time Meeting

Status

- The cycloconverter of Siemens stopped working on Wednesday after the maintenance day. After some trouble shooting efforts, it was decided to switch to the backup Westinghouse motor generator.
- Switched to Westinghouse on Thursday. Four hours later, next RHIC store was established. Most time was spent on the extraction setup.
- There were some extraction issues but the performance was restored to Siemens level next morning.
- The good part of using Westinghouse is that there seems no visible beam loss at f to p switch on the ramp.

Some Issues

- There have been many AGS permit pulls lately. Most of them were due to misbehaved BLM E14. The real problem is that it turned RF off in the middle of next AGS cycle, which caused worse loss and was bad for RF cavities, too. The threshold for E14 has been raised to very high today. The short term solution is to skip the next AGS cycle and act on the permit pull by next AGS T0 (Greg). The long term solution is to add a permit module to react in real time with tunable delay(K. Brown). In the meantime, we should look at those BLMs on maintenance day.
- There is occasional beam loss in the Booster related to the fuzzy b2b signal.
- Booster inj. field wobbling.
- AGS inj. field fluctuation and the related AGS extraction fluctuation (beam position, energy.....).
- The drool loss at extraction was mitigated by flatten the tune and bump size changes. But more can be done to make the two extractions equal.