



Accelerator Upgrades Shutdown

If Starts 10/1/10 then:

- RR Upgrades (~10.2 months – determines length)
 - Cooling systems done 12/10
 - 53MHz finishes 2/11
 - Controls finish 3/11
 - Instrumentation done 6/11
 - EL, IL, RR vacuum done/tested 8/3/11 (logic checked)
- MI Upgrades (~7 months)
 - LLRF done 4/11
 - Remainder done 12/10
- Kickers (~2 months needed to install – last ready/installed, determines end date)
 - RR Extraction/MI Injection done 3/11
 - BA kicker done 7/11
 - RR Injection done 11/28/11
 - Logic/durations of RR Injection path has been checked closely

Thus delay shutdown start 4 months, make 10.2 months long

- Start 2/1/11, end 12/9/11 (extended end date rather than starting earlier)



NOvA Review Schedule

Once this is done, what does the schedule look like?

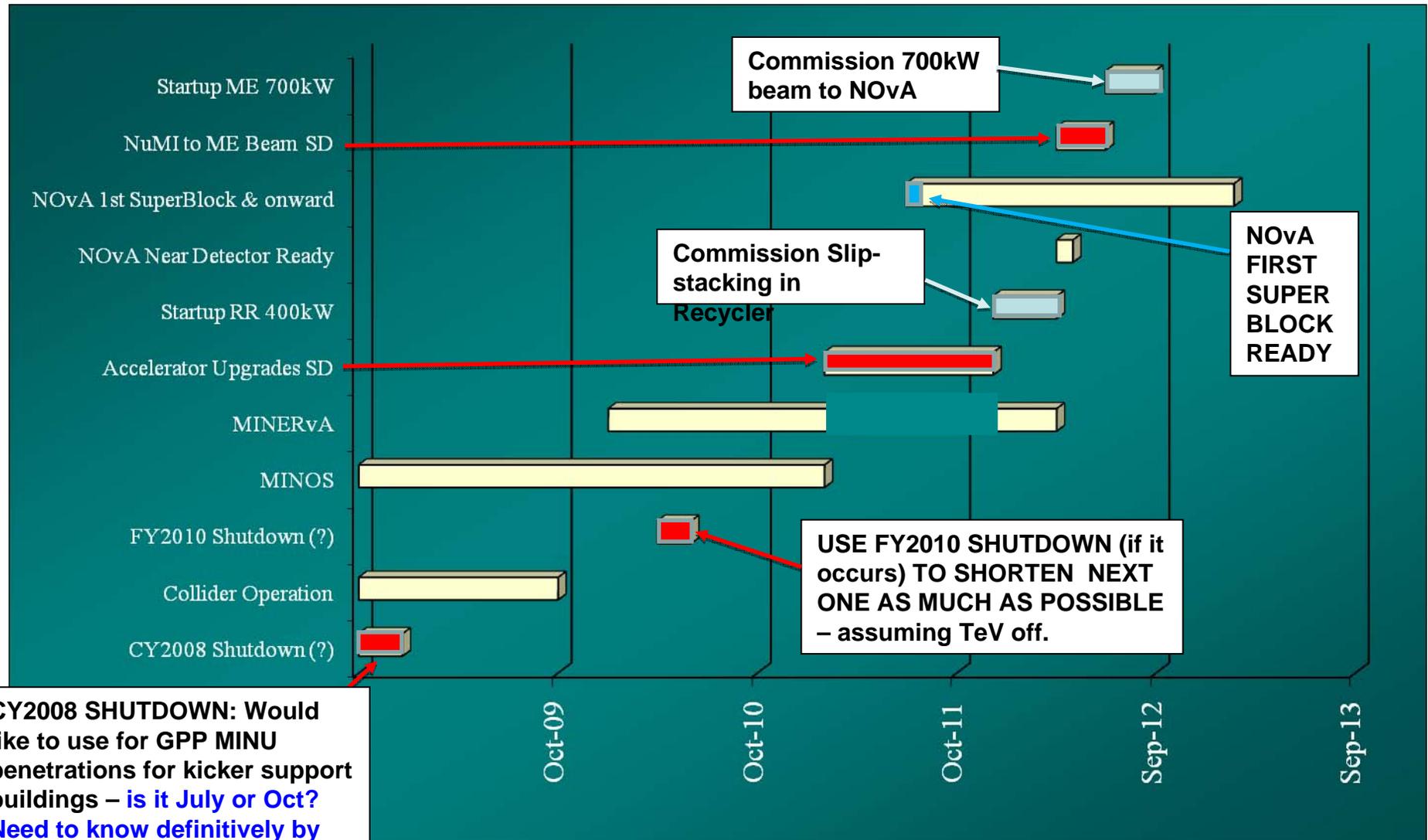
- RR Upgrades (~10.2 months – **determines length**)
 - Cooling systems done 4/11
 - 53MHz finishes 7/11
 - Controls finish 7/11
 - Instrumentation done 9/11
 - EL, IL, RR final alignment last 12/9/11 (IL last)
- MI Upgrades (~7 months)
 - LLRF done 7/11
 - Remainder done 12/10
- Kickers (~2 months needed to install – **last ready/installed, determines end date**)
 - RR Extraction/MI Injection done 4/11
 - BA kicker done 10/13/11
 - RR Injection done 11/28/11

Thus delay shutdown start 4 months, make 10.2 months long

- Start 2/1/11, end 12/9/11 (**extended end date due to holiday timing concerns**)



DRAFT NOvA ANU Schedule Overview



CY2008 SHUTDOWN: Would like to use for GPP MINU penetrations for kicker support buildings – is it July or Oct? Need to know definitively by end of Feb. (along with if there is money)

USE FY2010 SHUTDOWN (if it occurs) TO SHORTEN NEXT ONE AS MUCH AS POSSIBLE – assuming TeV off.