

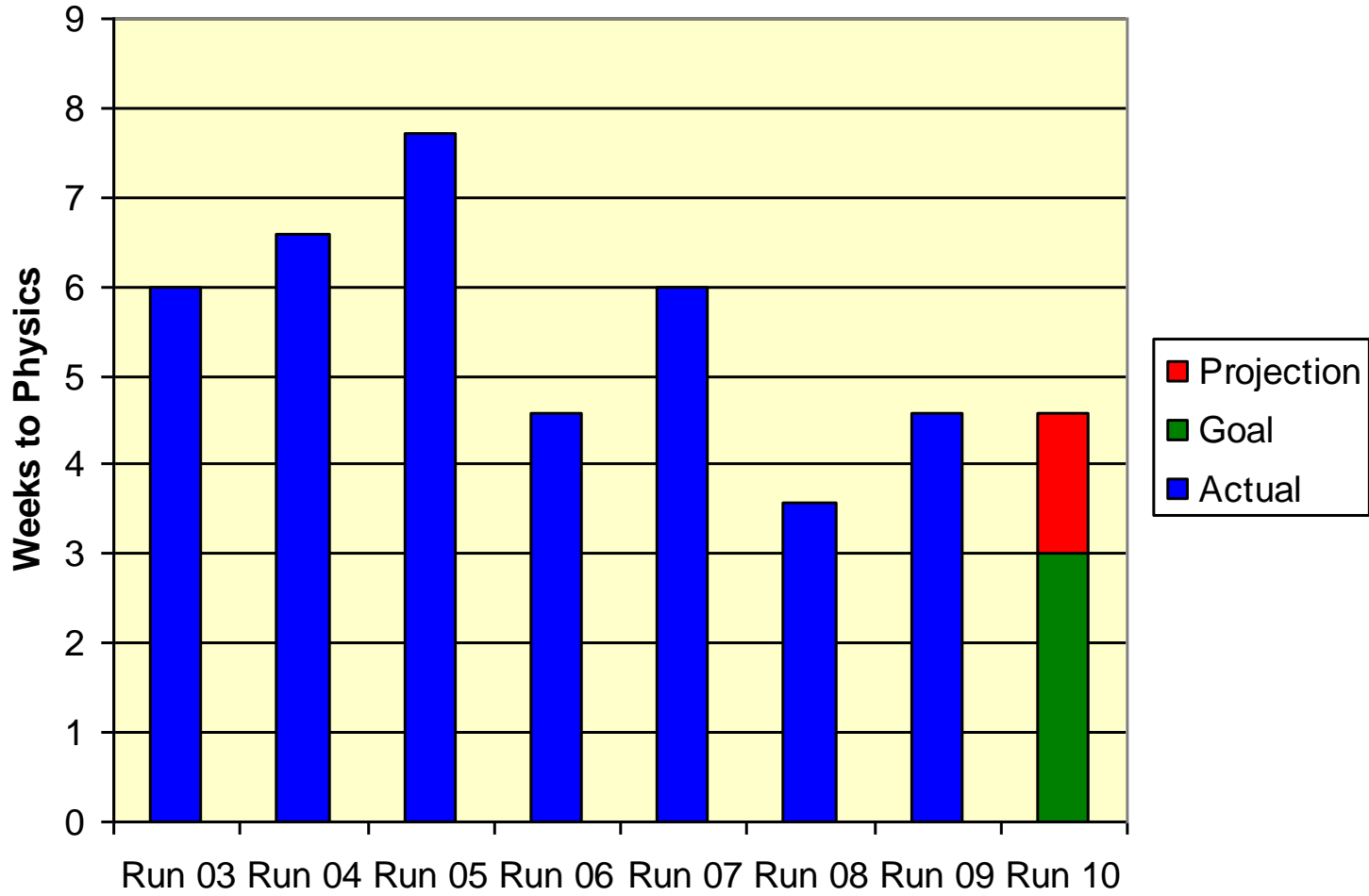
## Revised Run 10 Plan, Nov 25, 2009

$\sqrt{s_{NN}}$ (GeV)	Physics production or beam studies weeks	
	25-cryoweek run	27-cryoweek run
200	10	10
62.4	4	4
39	1.5	1.5
27	0	0
18	0	0
11.5 @ STAR	0	2
7.7	4	4
Beam studies @ 5 GeV and @ $v \approx 0.67$	0.5	0.5

# Possible Run 10 plan based on 25 Nov Revised Plan

- Run10, 25 cryo-weeks (my guesses after Dec 21)
  - Dec. 1, Begin cooldown to 4.5K
  - Dec. 4, Cooldown to 4.5K complete in both rings!
  - Dec. 5, beam setup in RHIC begins.
  - Dec 16, 20 hr unplanned Maintenance day
  - Dec 20 (AM)-21(PM), blizzard 09 shut us down
  - Dec. 24, RHIC Setup complete, begin Ramp Up for Physics (was 14 Dec, late)
  - Jan. 2, Projected Physics start  $\sqrt{s}=200$  GeV/n Au-Au (was 22 Dec, late)
  - Mar. 13, End 10 week  $\sqrt{s} = 200$  GeV/n Run, begin  $\sqrt{s} = 62.4$  GeV/n setup
  - Mar. 15, Begin 4 week  $\sqrt{s} = 62.4$  GeV/n run
  - Apr. 12, End 4 week  $\sqrt{s} = 62.4$  GeV/n Run, begin  $\sqrt{s} = 39$  GeV/n setup
  - Apr. 14, Begin 1.5 week  $\sqrt{s} = 39$  GeV/n run
  - Apr. 25, End 1.5 week  $\sqrt{s} = 39$  GeV/n Run, begin  $\sqrt{s} = 7.7$  GeV/n setup
  - Apr. 27, Begin 4 week  $\sqrt{s} = 7.7$  GeV/n run
  - May 25, End 4 week  $\sqrt{s} = 7.7$  GeV/n Run, begin  $\sqrt{s} = 5.0$  GeV/n setup – **25 CRYO WEEKS**  
**This is it unless we have \$'s to run longer – revisit in March**
  - May 27, begin 0.5 week beam studies at  $\sqrt{s} = 5$  GeV/n and  $v \sim 0.67$
  - May 31, end 0.5 week studies
  - Jun 2, begin  $\sqrt{s} = 11.5$  GeV/n for STAR
  - Jun 16, end 2 week  $\sqrt{s} = 11.5$  GeV/n run
  - Jun 17, Begin Cryo Warm-up
  - Jun 18, Warm-up complete, 25 week run ends – **28.4 CRYO WEEKS**

Time from start of 4.5 deg cooldown to Physics



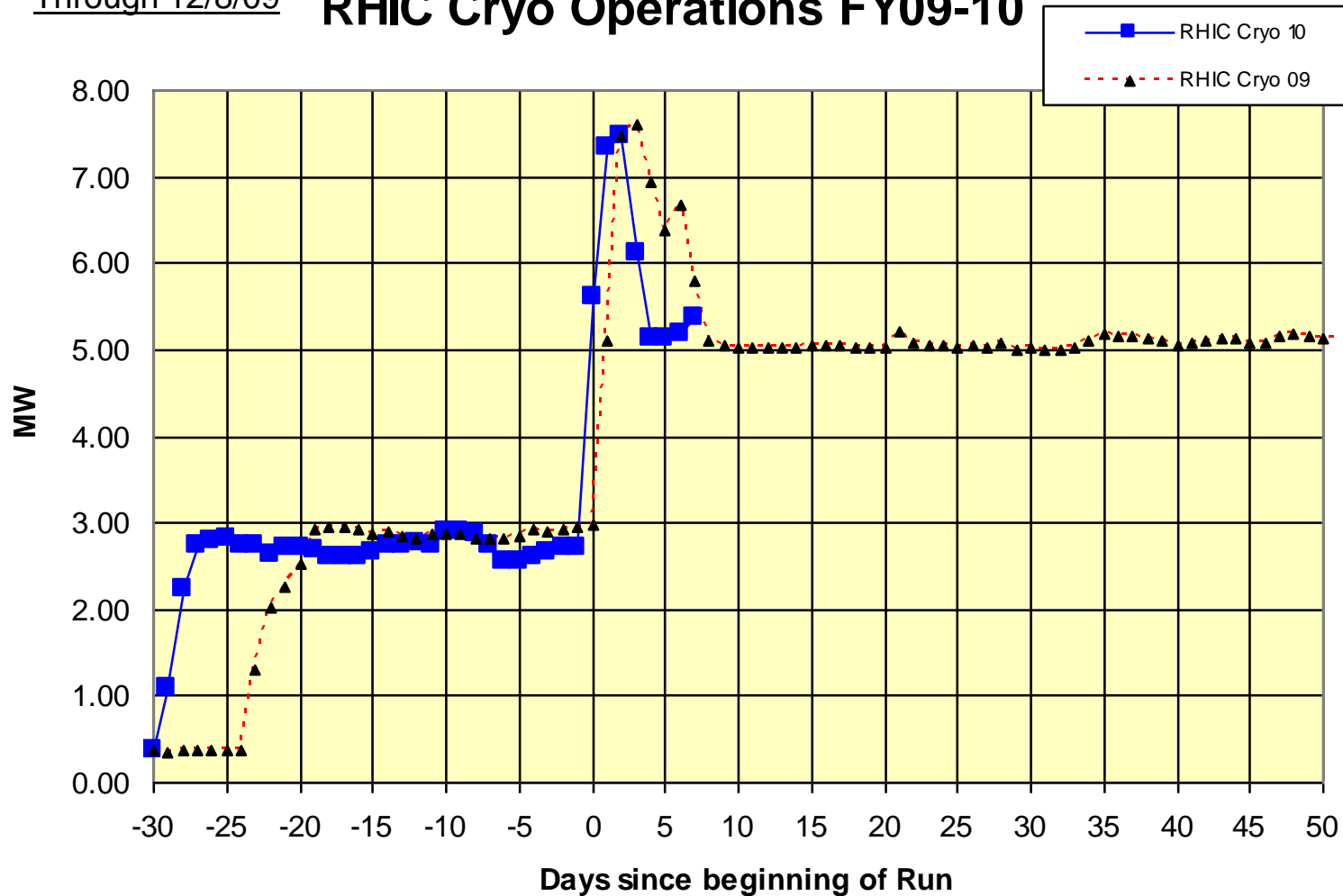
# Future Topics

- Toward Smaller  $\beta^*$  - new quad triplets – D. Trbojevic

Archive

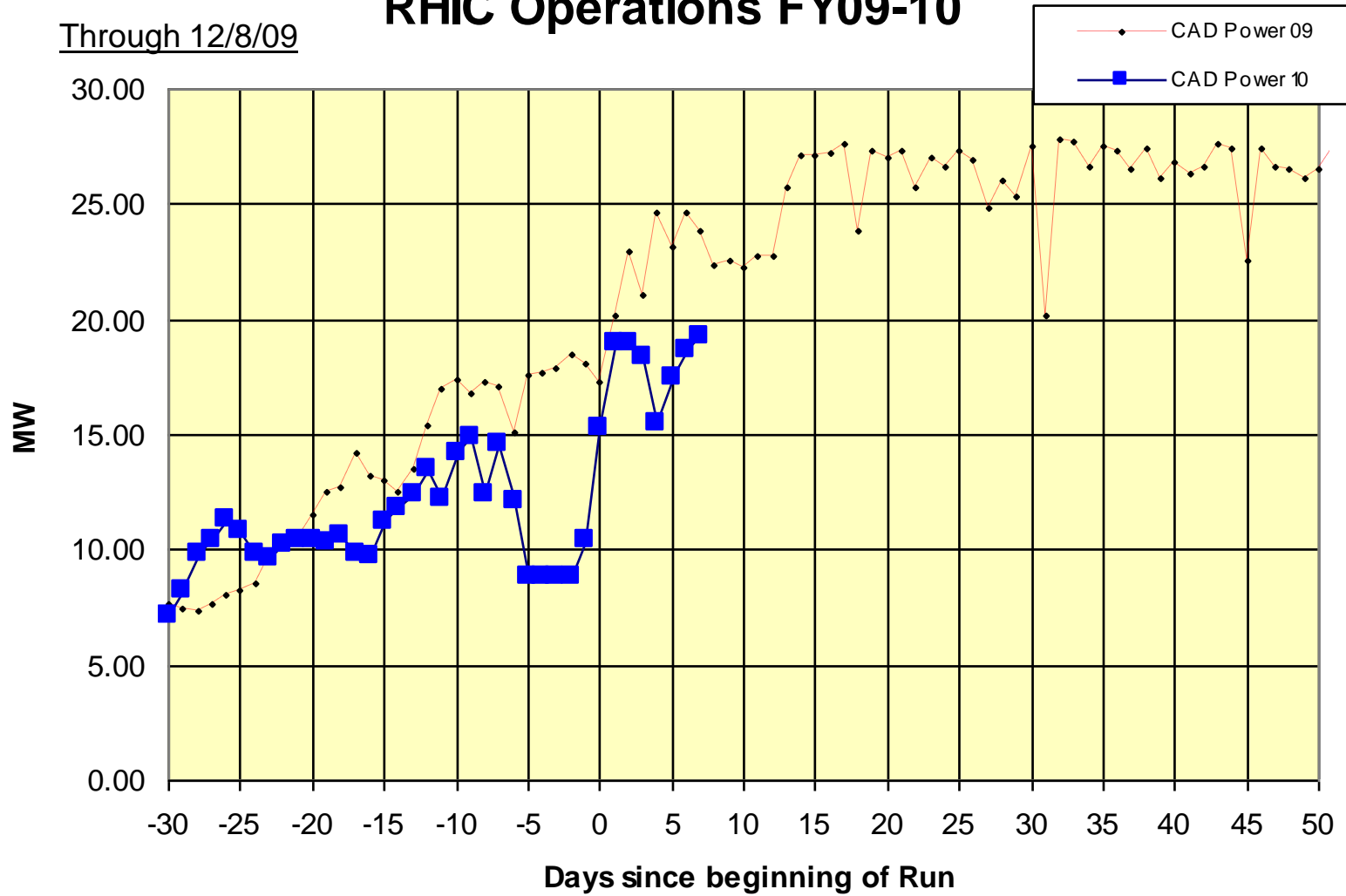
Through 12/8/09

# RHIC Cryo Operations FY09-10



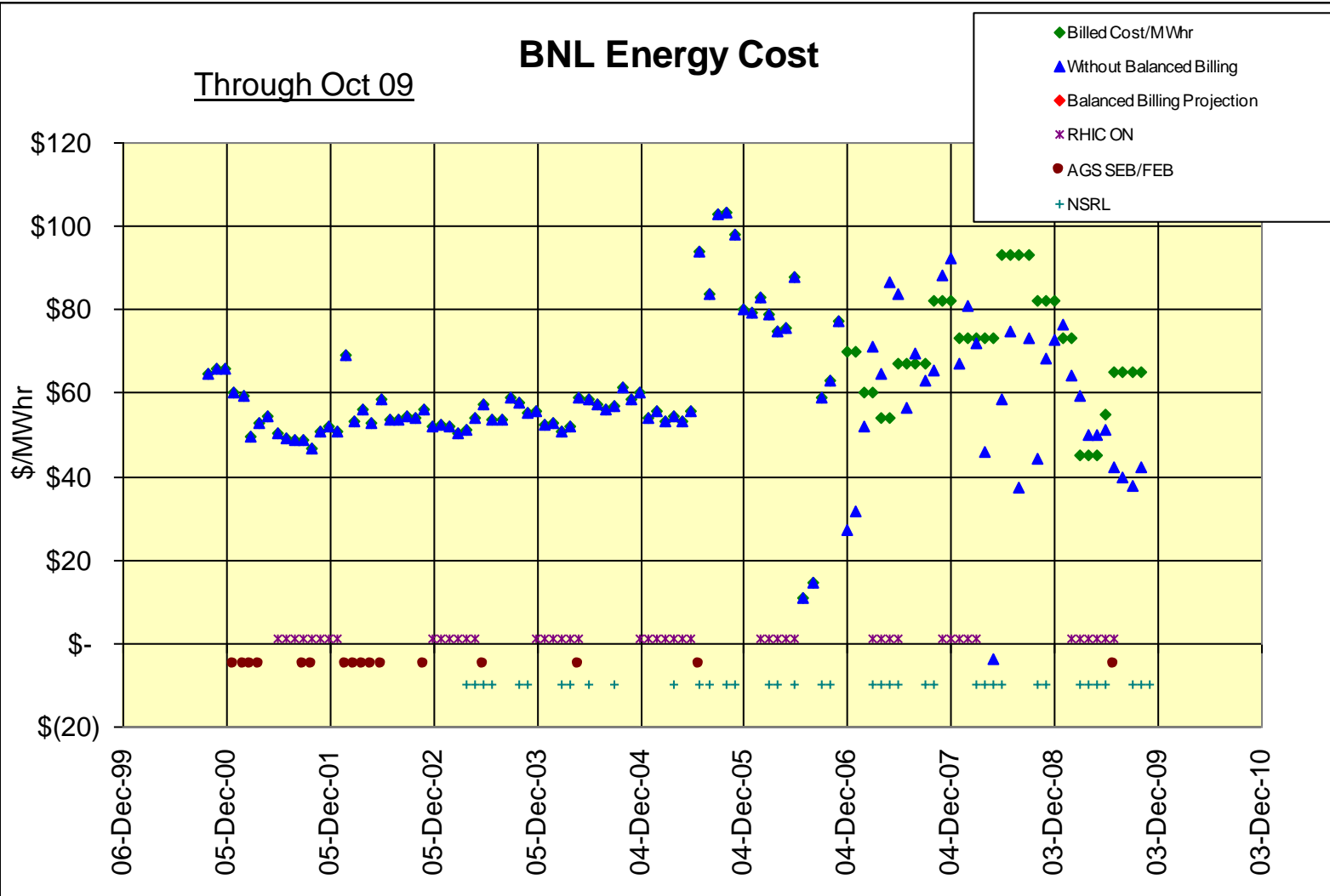
# RHIC Operations FY09-10

Through 12/8/09



# BNL Energy Cost

Through Oct 09





# Run 10 Au-Au Goals

11/19/09

- STAR

- $\sqrt{s} = 200 \text{ GeV/n}$

- Luminosity Sampled/Delivered = 2/4 nb<sup>-1</sup>
    - 250M Central Events
    - 300M Min-bias events

- PHENIX

- $\sqrt{s} = 200 \text{ GeV/n}$

- Luminosity Recorded/Delivered = 1.4/>6 nb<sup>-1</sup>
    - Minimum Goal:
      - Luminosity Recorded/Delivered = 1.1/3.9 nb<sup>-1</sup>

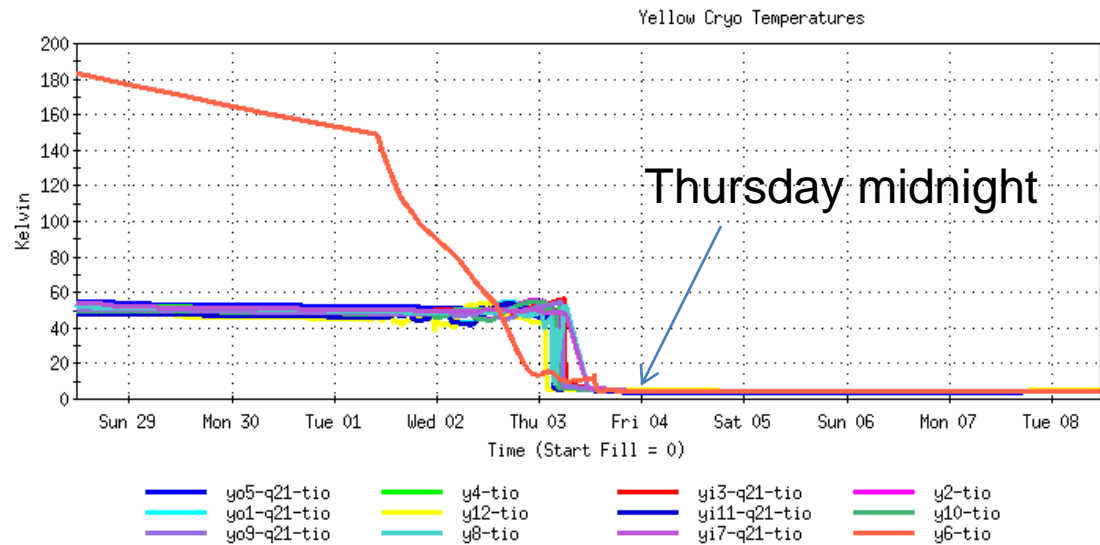
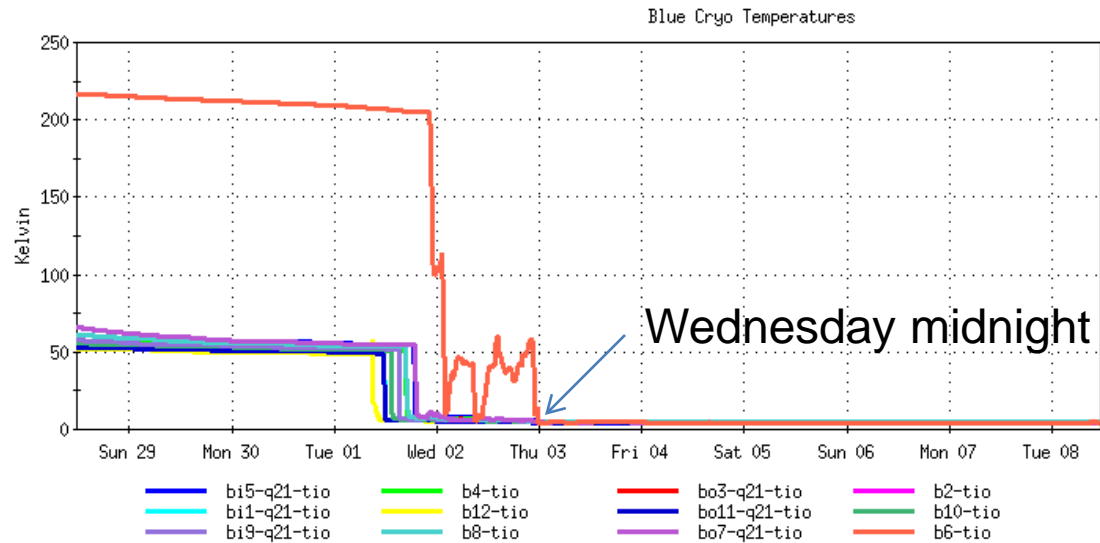
# Run 10 Setup

- Oct. 5, N2 scrubbing
- Oct. 30, Temp. Control devices in and ready (required for 45 K wave cooldown).
- Nov. 2, 45 K wave begins.
- Nov. 12, AGS Testing.
- Nov. 12-13, APEX Workshop
- Nov. 16, beam setup in Booster and AGS
- Nov. 16-20, RHIC Dry Run
- Nov 22, Beam extracted from AGS to W dump

# Cryogenic Blue & Yellow Rings (14 days)

[Ring Summary \(1 day\)](#) [Sector Plots \(1 day\)](#) [Sector Plots \(14 days\)](#)




Window Markers Analysis

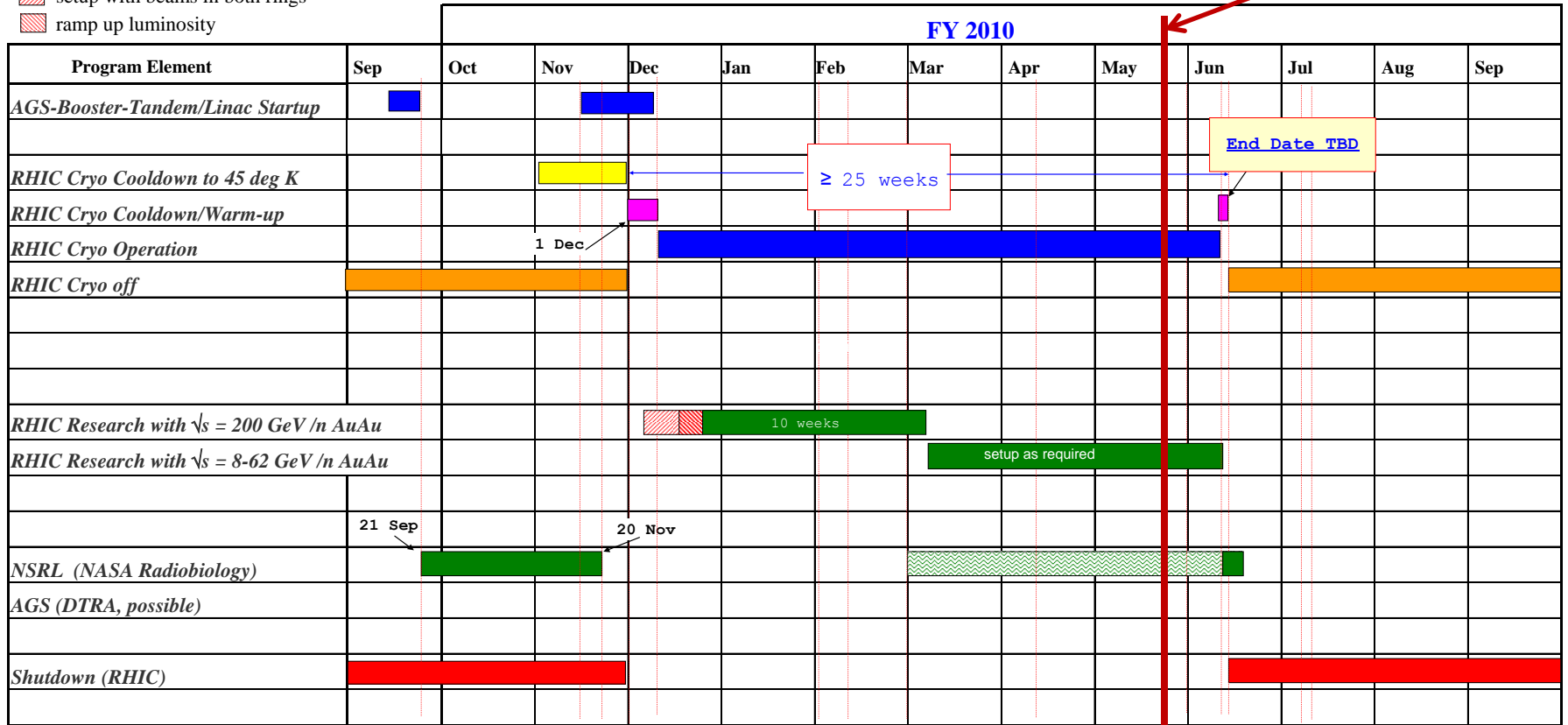


# C-A Operations-FY10

*Planned (budget permitting)*

**25 Cryo Weeks**

-  concurrent with RHIC
-  setup with beams in both rings
-  ramp up luminosity



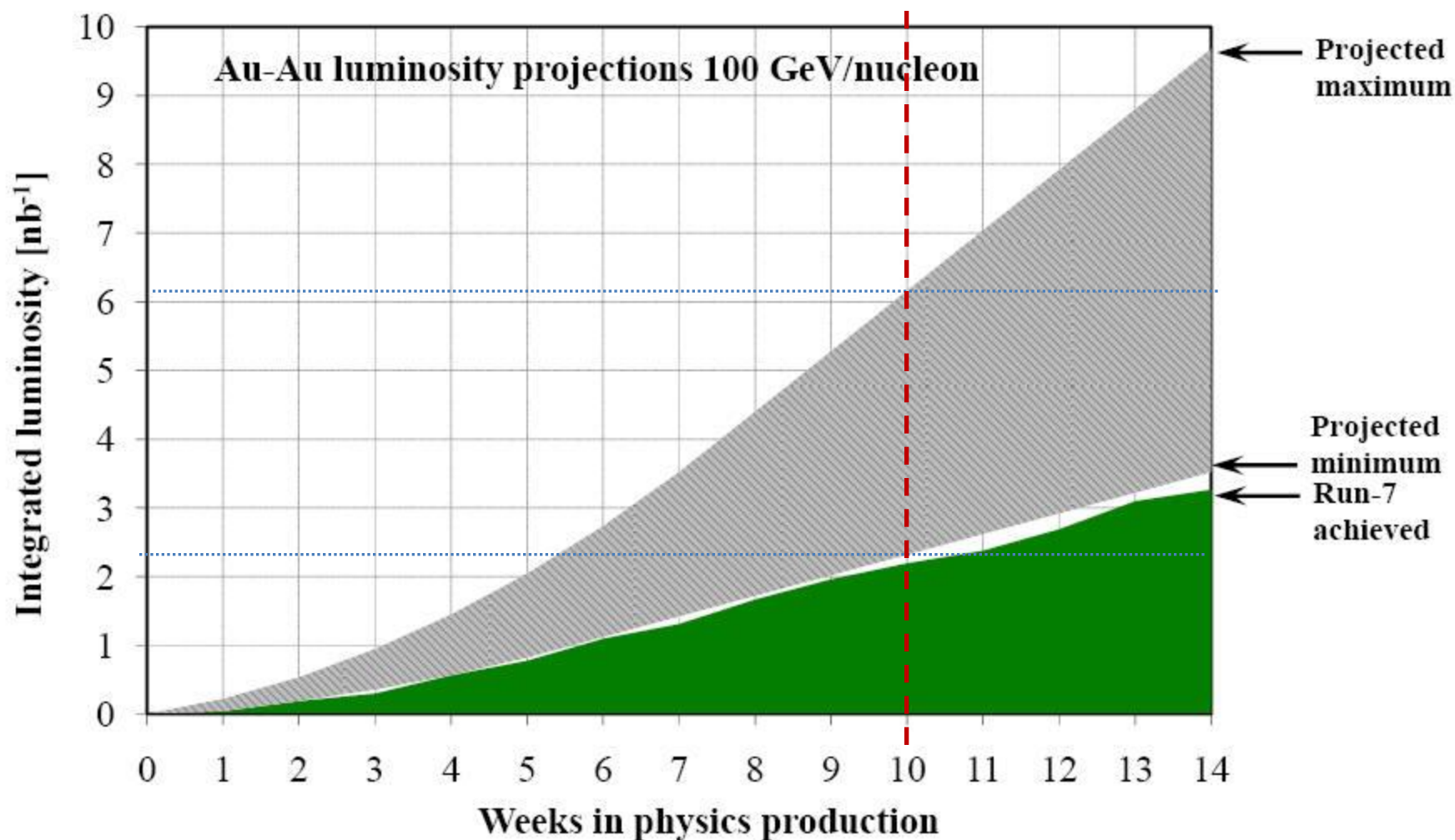


Figure 2: Projected minimum and maximum integrated luminosities for gold-gold collisions at 100 GeV beam energy, assuming linear weekly luminosity ramp-up in 6 weeks for the minimum and 8 weeks for the maximum.