# RHIC Machine/Detector Planning Meeting

2 Feb 05

## Agenda

- **Schedule Issues – (Montag)**
- **Report from experiments (STAR,PHOBOS,PHENIX,BRAHMS)**
  - **Progress toward goals - plot that shows goal(s) and progress toward goal(s) – and what is the required "delivered" luminosity.**
  - **Is a factor of two increase in Luminosity important? i.e. development time for this will take away from physics stores**
  - **Proposed end for Cu run. Do you plan to request a low energy Cu run? If so, how long?**
  - **Other concerns**
- **Report from Accelerators (Pilat)**
- **Polarized Proton Update (Bai)**
- **RCF Issues (Throwe)**
- **Other business**

**Planning Meeting Web Site: http://www.c-ad.bnl.gov/esfd/RMEM/rhic_planning.htm**

As of 2 Feb 05 (no changes since 26 Jan)

# RHIC Machine/Detector Planning Meeting

- **Details – as run/planned *(estimate based on actual budget)***

  - **18 Nov 04 – Cool down begins**
  - **23 Nov 04 – Blue Ring Cold**
  - **28 Nov 04 – Yellow Cold**
  - **29 Nov 04 – Short in D6-D8 dipoles Yellow Ring, schedule delay**
  - **3 Dec 04 – quad bus-bus short in sector 12, shutdown to repair**
  - **27 Dec 04 – short problem resolved, rings at 4 degrees again**
  - **27 Dec 04 - "2 week" RHIC setup with beam began**
  - **28-29 Dec 04 – found & fixed aperture problem in Yellow Ring (piece of Al foil)**
  - ***5 Jan 05 – "2 week" ramp-up with colliding beams began***
  - ***11 Jan 05 – 9+/- ? week physics with Cu-Cu began***
  - **15 Mar 05 – End of 9 week Cu-Cu run**
  - ***15 Mar 05 – begin 3 week pp setup***
  - ***5 Apr 05 – Begin 11.6+/- ? week pp Physics run***
  - ***15 Jun 05 – BNL Power Curtailment Program begins?***
  - **25 Jun 05 – end 11.6 week pp run, RHIC Run 5 ends**
  - **30 Jun 05 – Cryo switch to $LN_2$ complete, *32.0* weeks of RHIC cryo operation ends**

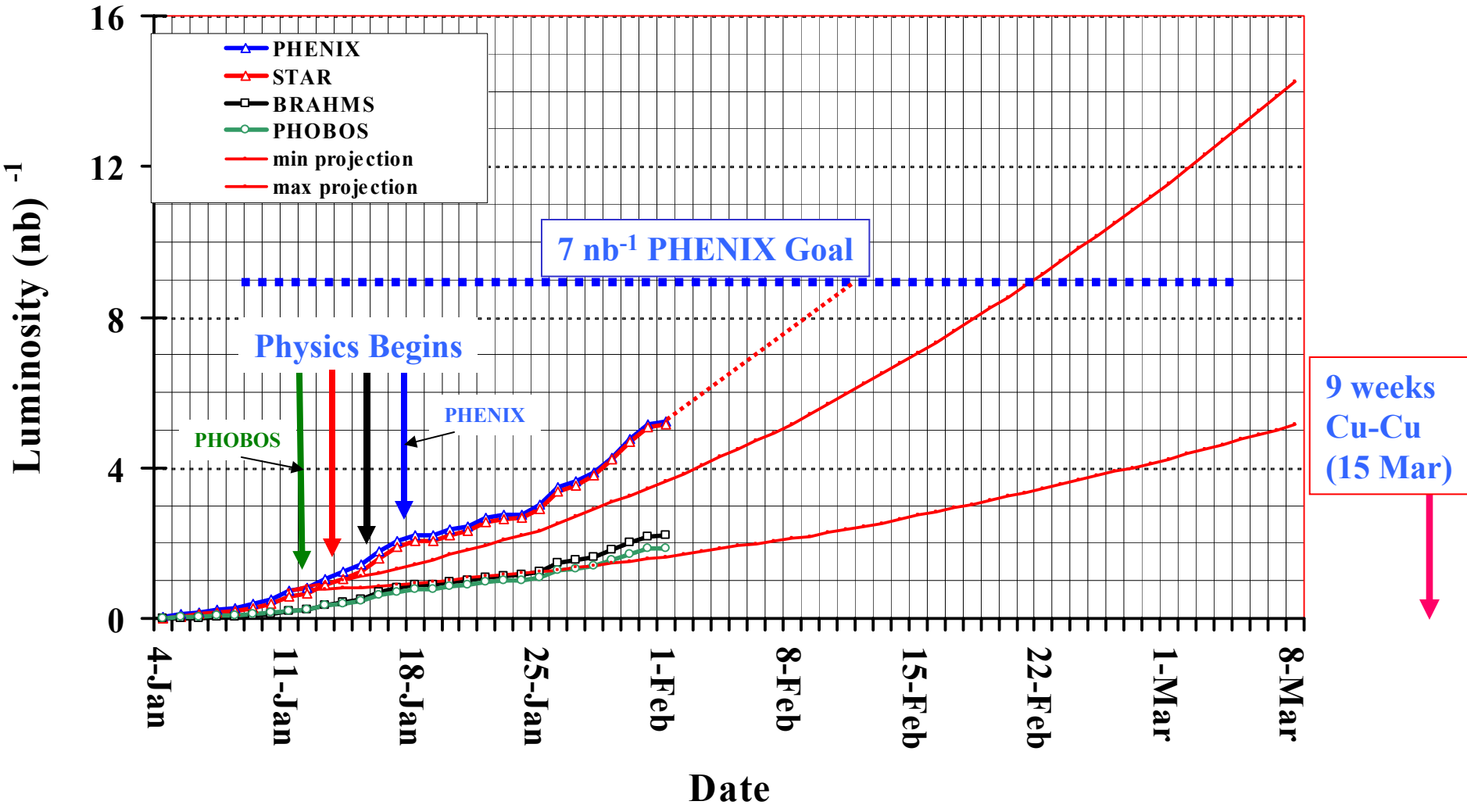
# RHIC Machine/Detector Planning Meeting

17 November 2004

## PAC Recommendations (very short summary):

- 8-10 week pp run should have highest priority
- Cu-Cu run should accumulate an integrated delivered luminosity of at least 7 $nb^{-1}$ at $\sqrt{s}$ = 200 GeV
- Cu-Cu at $\sqrt{s}$ = 62.4 GeV and 1 day at injection is advisable if above goals are met
- 1-2 day pp (unpolarized) run at $\sqrt{s}$ = 400-500 GeV desirable

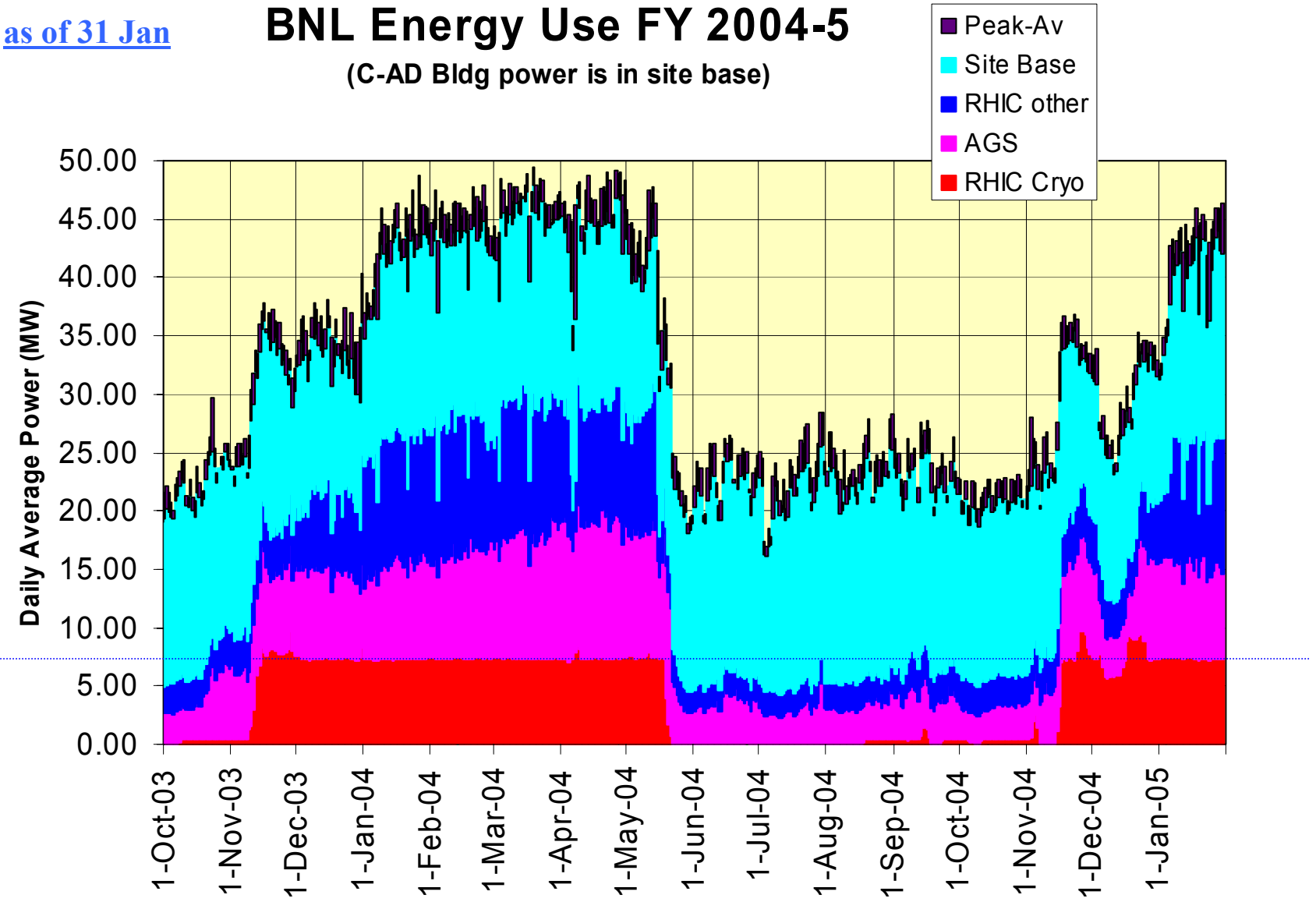
# RHIC Run 5 Delivered Cu-Cu Luminosity

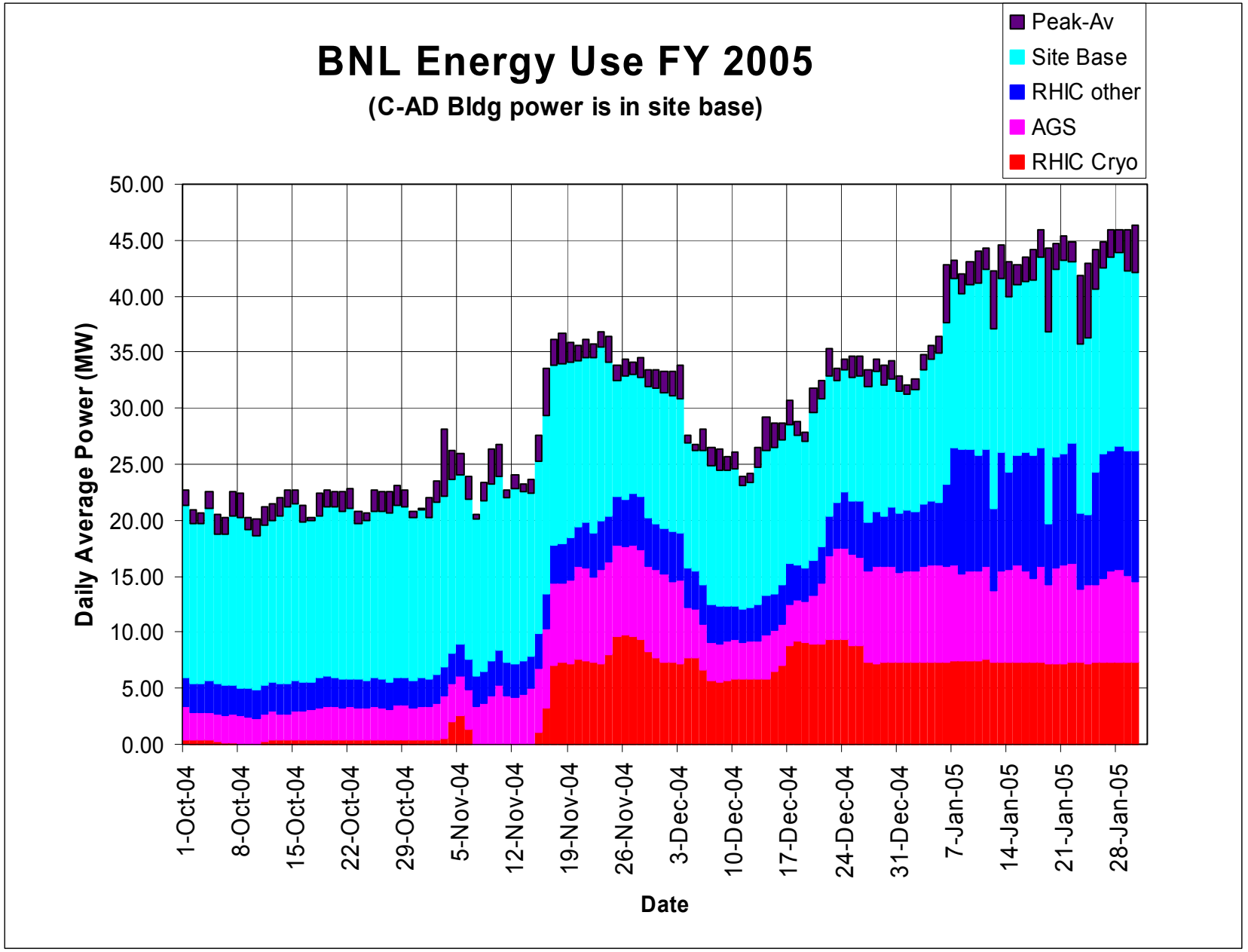


as of 31 Jan

# BNL Energy Use FY 2004-5

(C-AD Bldg power is in site base)




BNL Energy Use FY 2005
(C-AD Bldg power is in site base)
Peak-Av
Site Base
RHIC other
AGS
RHIC Cryo
Daily Average Power (MW)
50.00
45.00
40.00
35.00
30.00
25.00
20.00
15.00
10.00
5.00
0.00
1-Oct-04
8-Oct-04
15-Oct-04
22-Oct-04
29-Oct-04
5-Nov-04
12-Nov-04
19-Nov-04
26-Nov-04
3-Dec-04
10-Dec-04
17-Dec-04
24-Dec-04
31-Dec-04
7-Jan-05
14-Jan-05
21-Jan-05
28-Jan-05
Date

# RHIC Machine/Detector Planning Meeting

## Archive

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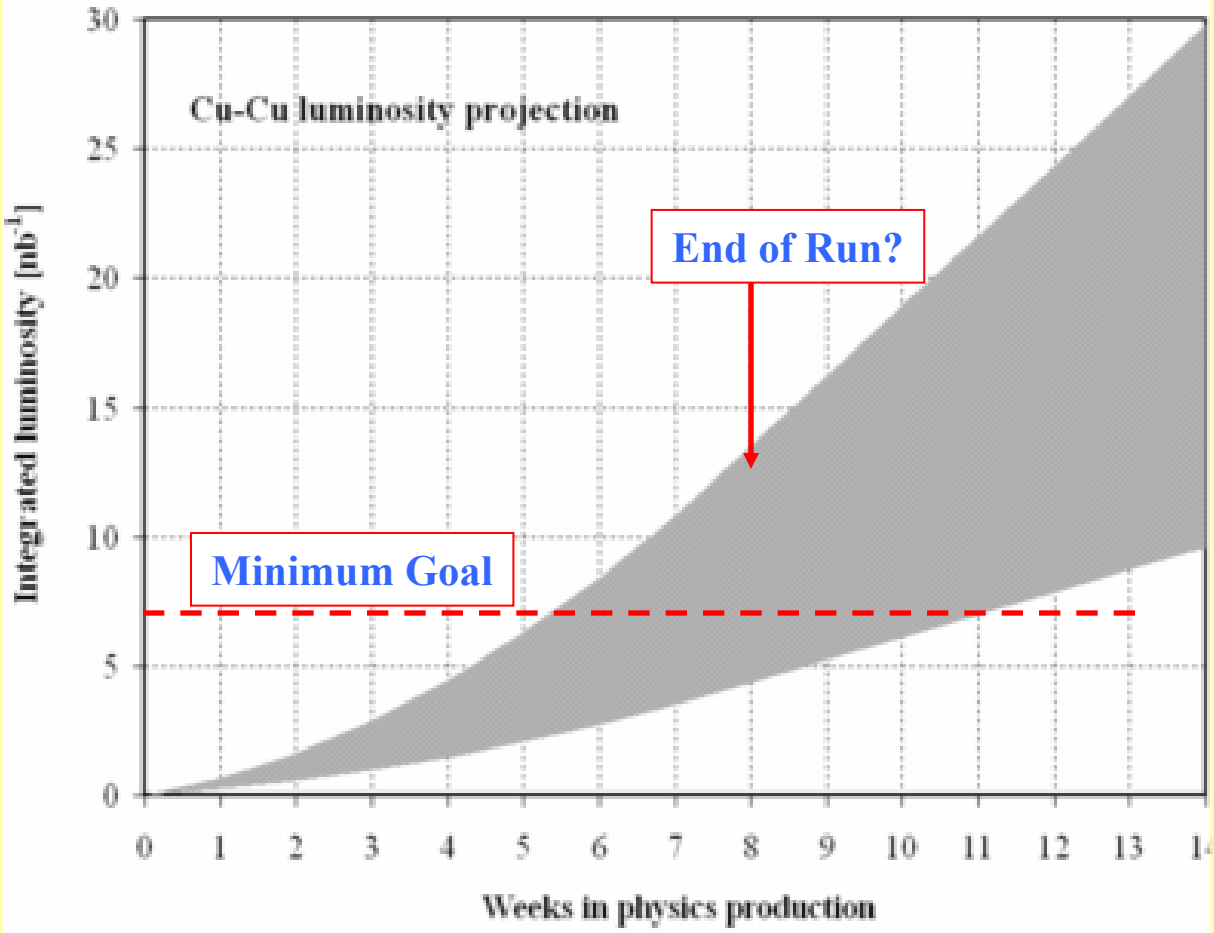
17 November 2004

## Purpose of this meeting:

- To address issues and priorities relating to the optimization of physics output from RHIC experiments.

- To discuss and promulgate policy (when needed).

# RHIC Machine/Detector Planning Meeting




Projections based on the following beam intensity:

Miminum :

**45 * 2.9 x10$^{9}$**

Maximum:

**28 * 6.6x10$^{9}$**

Luminosty evolution:

**8 weeks ramp-up** during physics production

**β* = 1 meter**